Missouri Department of Conservation

The First 50 Years

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The First 50 Years

The First 50 Years

by James F. Keefe

Missouri Department of Conservation
Jefferson City

***This book is dedicated to my wife "Dink" Doris Jeanne Royse Keefe who tended the home fires while I fought conservation's battles. Then she fought a few battles of her own, and helped make possible the* Design for Conservation.**

The endsheets are a photographic reproduction of the poster used in the 1936 campaign to create the Conservation Commission of the State of Missouri.



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Jefferson City, Missouri 65101

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Foreword

I had just completed thirty-four years with the Department when I mentioned to Director Larry R. Gale that it was about time for me to retire. Larry knew that the Department would be celebrating its fiftieth anniversary in 1986-87 and suggested that before I retired I ought to write a history about the Department, to be brought out during the anniversary year.

I frankly didn't want to take on that chore. I was (and am) all too aware of my shortcomings as an historian. True, I had been a participant in thirty-four of the Department's years, but that did not necessarily equip me to be its historian. But I talked the idea over with friends and every one of them urged me to do it. Then I got a note from Imelda Scheppers, who had recently retired as Commission secretary. She urged me to write the history. That did it.

I discussed the project with Larry, and with Allen Brohn who had been my immediate boss for a good many years and whose counsel I value. We agreed that I should be relieved of my duties as Information officer so I could devote full time to the task of getting down on paper something of the events and the people who made up the Department during its first half-century. The Commission endorsed the project and I was relieved as Information officer and attached to Larry's staff July 1, 1985.

It was agreed that the selection and perception of things to include would be mine, subject only to Larry Gale's veto—a committee can't write a history. It was also agreed that I wouldn't do a white-wash of the agency; if there were warts, I'd be free to include them. With those things decided I set to work.

Using the minutes of the meetings of the Conservation Commission, the annual reports of the Department, and the state manuals (the Blue Books), I drew up a chronology of events that makes up Part II of this history. Preparation of the chronology gave me some perspective for writing the narrative history that is Part I. The two parts complement each other, but each can stand alone.

Both the chronology and the narrative were enriched by interviews with former commissioners and employees, and a few people outside the Department. Especially helpful in giving me the "feel" of the times and events were: Kenneth M. Babcock, James L. Bailey, J. Vernon Bennett, Jim Tom Blair III, Frank P. Briggs, Allen Brohn, Charles H. Callison, Millard K. Chapman, Cleval Corey, Bill T. Crawford, Robert G. DeLaney, A. Hugh Denney, Virginia Dunlap, William H. Elder, John L. Funk, Larry R. Gale, Leonard Hall, Bettye Hornbuckle Gibson, Townsend Godsey, Milton G. Hoyer, Joseph Jaeger Jr., Lisle Jeffrey, Paul B. Johnson, Carl R. Noren, Charles A. Purkett Jr., Richard H. Rotsch, Leonard Rowe, C. Dan Saults, Charles W. Schwartz, Jack A. Stanford, Ed Stegner, William E. Towell, A. Reed Twichell and Ray M. Wells.

I received considerable assistance from various staff members of the different divisions and sections but want to especially acknowledge Everett E. Clark, Aaron R. Chapman, George P. Dellinger, Dan F. Dickneite, Francis E. Eyman, James P. Fry, John V. Frye, Edwin H. Glaser, Kerwin F. Hafner, Donald K. Heard, Charles E. Hooker, David D. Hurlbut, Malcolm K. Johnson, Samuel B. Kirby, John B. Lewis, Al Palladino, Roger E. Ponder, Jerry J. Presley, Jo Radmacher, Lee C. Redmond, James P. Rocca, Mark H. Sullivan, James R. Whitley, John E. Wylie and special thanks to Cheryl Baslee, Janet Henderson, Carolyn Lootens and Joann Thessen.

One of my biases is the appreciation I have for the clerical and service people of the Department, who get no mention when the kudos are passed around, but who really are the glue that holds the entire operation together. Especially valuable have been the section and division secretaries who help keep things rolling, year after year. They, too, had the zeal and dedication that helped make the Department what it is. Listed below are those

with at least twenty-five years service:

Dorothy K. Bloomfield (Fisheries) 37 years, Marjorie T. Elliott (Forestry) 30 years, Lydia M. Goldammer (Information) 28 years, Bonnie (Huddleston) Hart (Wildlife) 26 years, Nova M. McNew (Personnel) 29 years, Audrey E. Mahan (Protection) 30 years, Josephine A. Radmacher (Administration) 30 years, Imelda M. Scheppers (Administration) 31 years, Teresa M. Schwartze (Administration) 31 years and Margaret (Peggy) Thompson (Protection) 30 years.

They, and the rest of the support staff, all merit a special salute, too.

Lastly I want to acknowledge the contributions of my editor Kathy Love and my designer June Hunzeker who took these thousands of words and tried to make a book out of them. In addition, the efforts of my typesetters, Mitzi Crump and Bertha Bainer, and graphics technician Kevin Binkley, are gratefully acknowledged, as well as photography staffers Jim Rathert and Dawn Drainer for their assistance with illustrations.

I am not a professional historian and I have been an actor in this history that I write. As such, it isn't entirely possible for me to be detached and dispassionate. My editor has winnowed out a lot of "we's" that I inadvertently wrote—since I won't ever be able to detach myself completely from the Department of Conservation. I hope she caught them all. But as an actor in the drama, I bring to this task some personal biases as to what I perceive to be important or interesting. My lack of professional training in history writing will be evident to any professional historian. My biases will be evident to any other member of the Department of Conservation, and there is nothing I can do about either.

I hope that I have brought to the reader something of the flavor, the sense of mission, the zeal that has been a hallmark of the Missouri Department of Conservation these past fifty years. I hope that same determination and zeal lasts another fifty years.

J. F. K.

The Way Things Were

Each generation sees the world for the first time. Most Missourians, driving through the forested Ozarks, believe it was always like this, a more or less pristine wilderness. Visitors from surrounding farm states who tour Missouri are impressed with the large amount of "unused" land in trees or brush. Coming from states that are largely giant culture pans, with the hand of man clearly evident everywhere, Missouri must look like an untrammeled wilderness. But the Ozark region has been heavily used in the century and a half since European man began exploiting its resources. The Ozarks represent some of the most abused land anywhere on the continent, and its present condition is a tribute to the efforts of conservationists over the past fifty years.

Only a generation or two ago, the forested hills were largely denuded, the fragile soil gone from the rocky slopes, the streams choked with gravel. Old photographs in Carl Sauer's little book, *Geography of the Ozark Highlands of Missouri*, written in the 1920s, show largely bare hills. Only a few decades ago it wasn't unusual to see fields of rocks in the Ozarks, or acres upon acres of broomsedge, that indicator of worn-out land.

Today, fields of bare rocks are rare, and broomsedge has largely been replaced with improved pastures of fescue or other grazing plants. Wildfires are nowhere nearly as common as they were, and reforestation cloaks hills that were formerly cut, goated and burned.

Our ancestors were probably the most rapacious users of natural resources the world has ever known. They came into Missouri intent on exploiting it. It was a land to be used, even used up, if necessary. There was little thought of tomorrow.

The first Europeans were after minerals and furs. The earliest probably were *coureurs du bois*—"woods runners"—fiddlefooted wanderers with a pack of trinkets to trade to the Indians for furs. Later, as the fur trade became better organized, the government licensed certain traders, who employed *voyageurs* to travel to the Indians and trade. The unlicensed *coureurs du bois* became outlaws, which deterred them not one bit.

A second group came, seeking minerals. Lead and salt were the first to be exploited. Slaves were brought in to work the lead mines, and the forests were cut over to use in smelting the lead or to evaporate the salt from mineral spring water. The area around the eastern Ozarks became honeycombed with mining operations. In 1818, Henry Rowe Schoolcraft, geologist and ethnologist, wrote that one had to constantly be on the alert lest he fall into the pits made by miners, which were everywhere. The Ozarks already were being hard used.

Settlers followed the miners, and they cleared some of the woods for croplands and turned loose large numbers of pigs and cattle to forage in the rest. This pattern of European settlement and exploitation was to continue right up to modern times.

The forests were used for building materials or fuel, the wildlife exploited for its pelts or for food. A lot of wildlife was simply gunned down as targets. Throughout our history, we read of travelers shooting wildlife just for the fun of it. The fur traders going up the Missouri River shot down the elk, buffalo, deer and antelope along the banks, just to pass the time. The surviving wildlife learned to move back away from the river's edge.

Later, people crossing the Great Plains by train used to shoot into the buffalo herds, with no thought of retrieving the great beasts that were brought down. It was there, it was plentiful—shoot it.

No voices were raised against such waste. Wildlife so abundant simply would last forever. Later, the government deliberately fostered wholesale destruction of the buffalo as a way of controlling the wandering Indian. The settler killed off the larger wildlife—buf-

falo, elk, cougar or bear—because it preyed on or competed with his livestock. Small creatures—Carolina paroquets, passenger pigeons or furbearers—went simply because they were a nuisance, or as products to market, but often because their habitat was so altered they could no longer exist.

Even before European man, the Indian had exploited the forests and prairies for his own purposes. Le Page du Pratz, a physician and chronicler of the southern Mississippi, traveling from Natchez to the mining region of our eastern Ozarks in the early 1700s, described the annual burning of the land by the Indians as a means of improving conditions for game. The Indian also used fire to drive game to its destruction. As the Indian obtained traps and guns, his exploitation of wildlife for trade to the white man markedly increased. Only the relatively low numbers of the Indian prevented him from being as destructive as the white man.

Southeast Missouri once supported a large Indian population that practiced extensive cultivation that greatly altered the environment. "East Prairie" and "West Prairie" of historic times were remnants of old fields that had been cleared, burned and cultivated by the Indians. These red men had largely disappeared before European man settled along the fringe of swampy southeast Missouri, and much of that area managed to escape exploitation until early in this century. Then lumber companies moved in and cut the great swamp forests, drained the swamps and created a seven-county billiard-table landscape that was



The Ozarks forests in 1937 showed what 100 years of cutting, burning and grazing had done. The trees were of low quality, many of them fire-scarred, and the rocky soil was exposed everywhere.



The forests of Missouri's Bootheel region were the last to be exploited, but the pattern of exploitation was the same as other regions. The forests were high-graded and the wildlife hunted almost to extinction. This 1902 photo shows the Worst, Sherman & Brinkerhoff Stave Mill near Hayti and some of the large logs.

inimical to wildlife. Much of southeast Missouri shows the hand of man as heavily as the great cornbelt farm regions of Illinois and Iowa.

Huge tracts of Missouri forests were cut over for railroad ties, and for a few years tie-rafting became a way of life for some Ozarkers. The trees were cut, the ties hacked out and dragged to some river's edge. There they were formed into rafts and floated to collection points, the rafters living aboard the raft as it floated downstream. They walked back from the collection points and began a new round of exploitation. Steamboats and early railroads demanded huge amounts of wood for fuel. Growing towns, likewise, demanded wood for building, heating, cooking and other purposes.

The interior Ozarks—the Current River country and its tributaries—was about the last area settled. It was so remote, so difficult to get to and so poor that it attracted only the loners interested in subsistence farming augmented by hunting and trapping. Settlers eked out an existence, running pigs and cows in the woods and scratching out grain fields along the narrow river bottoms. Burning the woods each spring, "to keep the snakes and ticks down" and improve the grass, was a standard practice. Here, too, the lumber barons eventually came, in the late 1800s and early 1900s, and at one time Grandin boasted the largest sawmill in the world.

Mining and timber exploitation went hand in hand. In the early 1800s, Maramec Spring was the site of an early iron smelting



This turn-of-the-century group of rabbit hunters wasn't bothered by any regulations.

operation. The surrounding forest was cut off and made into charcoal. The business failed when it could not compete with newer smelting processes developed in the east.

During World War I, Carter County saw its hills stripped of timber for a charcoal/iron-ore smelting process at Midco, now a ruin that is difficult to find in the reforested area. The population of the county surged and then fell off, as the resources gave out. The Midco story is typical of the boom-and-bust exploitation of the Ozarks.

All over the state wildlife was exploited by market gunners who sent wagonloads of game to city markets. So politically powerful were these market gunners that they successfully fought off attempts to limit their activities well into this century.

By 1933, wildlife was at a generally low ebb. Sportsmen, especially, were beginning to feel increasing concern about its future. In 1934, University of Missouri zoology professor Dr. Rudolf Bennitt, and colleague and former student Werner O. Nagel, began their landmark wildlife survey.[1] They reported that fewer than one hundred ruffed grouse remained in the state. Deer numbers were estimated at "not more than" 2,000 animals, with perhaps 3,500 wild turkeys scattered across forty-five counties. Quail and rabbits were decreasing, as were raccoons, muskrats and mink. The only species they felt might be increasing were beaver, whose population was estimated at seventy-five to one hundred animals, and mourning doves.

Bennitt and Nagel did not concern them-



In 1910 the Raithel Meat Market on High Street in Jefferson City offered deer and bear to its customers. Also visible are two bobcats, some rabbits and a weasel. Shortly after this date such commercialization in wildlife declined as laws began to be better enforced.

[1] *A Survey of the Resident Game and Furbearers of Missouri*, by Rudolf Bennitt and Werner O. Nagel, University of Missouri Studies, Volume XII, Number 2, April 1, 1937.

selves with fish in their study, but streams had been debased by erosion following lumbering and wildfires, and fish life was in as precarious a position as land species. Just ahead were several years of drought that would further reduce wildlife and play havoc with the abused forests. But conditions were coming together to set the stage for a conservation comeback.

The Democratic landslide of 1932 which brought Franklin D. Roosevelt into the White House also brought significant changes in Missouri's political scene. Guy B. Park, Democrat, took over from Republican Governor Henry S. Caulfield. Governor Park replaced the Republican commissioner of game and fish, John H. Ross, with Democrat Wilbur C. Buford, a St. Louis lawyer from an old Ozark family long active in politics.

At the end of his first year, 1933, Buford summarized the conservation activities of his administration, beginning with the report that there had been a *complete turnover* of Department personnel. It was a prime example of the old spoils system, when one administration replaced another.

Buford reported that following twenty-three years of pheasant release failures, game farms were to be abandoned. Trout-hatchery production was to be cut back and emphasis placed on warm-water species for stocking. The legislature had recently adopted length limits on many fish species, which were hailed by the Department as an advance in fisheries management.



Wilbur C. Buford was last political director.



Drainage of swamps in southeast Missouri in the early 1900s speeded cutting of forests.

One effect of the Great Depression was a three-year decline in income for the Fish and Game Department, from $365,163 in 1930 to a low of $266,390 in 1933, the year Buford began his term. But the Depression motivated the federal government to spend considerable sums for conservation through various public works programs for the unemployed.

Scarcity of water, owing to the drought, made the waterfowl season the "most unfavorable in history." Fishermen, because of heat and low stream conditions, reported poor luck despite heavy stocking. The legal deer kill during a three-day season in seventeen south-Missouri counties totaled sixty-eight.

Thoughtful and concerned sportsmen all over the state were voicing their displeasure with political game and fish management. Typical of these were the words of dental surgeon Hale W. DeJarnatt of Centralia, written to Attorney General Roy McKittrick, February 9, 1934:

"I am a sportsman and interested in the future welfare of our game, fish and birds. Quoting one of your [McKittrick's] statements, 'that the Republicans spent during the last eight years some $2,613,695.32 of the sportsmen's money, mostly for salaries and propaganda, only the small amount of about $80,000 for replenishing the game of our state.' We cannot forget these depredations.

"What concerns we Democrats and sportsmen is what the Democrats are going to do while they are in power . . . .

"I call your attention to the irregularities relating to the salaries in the Game and Fish Department . . . . I question the right of the Department to acquire a foot of ground that cannot be used in the interest of the sportsmen as a hatchery, refuge or propagating of game. I question the right of the Department to acquire or purchase at the expense of sportsmen these recreation parks and historic sites. It is an injustice to spend their license money for historic and recreation places.

"The sportsman's tolerance is nearing the breaking point. I look for, in fact I am reliably informed there will be a petition asking for a referendum placing a constitutional amendment on the ballot the next election. The amendment will relate to the Game and Fish Department and will ask for a bi-partisan commission of four members and a law similar to Pennsylvania's efficient law. By the help of the American Legion, the Izaak Walton League, the horde of sportsmen and lovers of the great out-of-doors, I am confident this amendment will carry."[2]

In 1935, Missouri was in the grips of one of the most severe droughts in recorded history. Even though 1935 was not as dry nor as hot as the previous year, by mid-summer the mercury climbed above normal highs. Rivers and streams were either dried up or reduced to trickles. Even in the summer months, a smoke pall hovered over the Ozark hills, as wildfires raced virtually unchecked through parched vegetation.

It was the sixth year of the Great Depression, and the minds of Missourians, when they weren't worrying about jobs, the heat or drouth, were occupied with the Lindbergh murder trial, the assassination of Senator Huey P. Long, and impending war as Benito Mussolini massed men, tanks and planes on the Ethiopian border. Joe Louis knocked out Max Baer in the fourth round of their championship fight. Alabama's passing attack beat Stanford in the Rose Bowl. At the movies, Fred Astaire and Ginger Rogers starred in *Top Hat.*

Senator Huey Long's body was lying-in-state in the Louisiana capitol at Baton Rouge on Tuesday, September 10, 1935, when sportsmen and conservationists from all over Missouri met in a hotel at Columbia and formed the Restoration and Conservation Federation of Missouri.

They elected E. Sydney Stephens, Columbia publisher, as president and authorized him to form a committee to draft a constitution and by-laws for the organization. The organization was to have thirteen directors, one for each congressional district in the state.

Roland Hoerr of St. Louis was elected vice-president and John P. Gass of Springfield, secretary.

[2] It is interesting to note that DeJarnatt was aware of a constitutional amendment affecting conservation many months before it was adopted in September, 1935.

WOULD RESTORE STATE'S WILD LIFE

Move to Create Non-Partisan Game and Fish Commission

MEETING HELD HERE

E. Sydney Stephens Elected Head of Newly Formed Federation

Sportsmen and other conservationists representing organizations in every section of Missouri joined here yesterday in the organization of the Restoration and Conservation Federation of Missouri which will launch an immediate campaign for restoration and conservation of bird life, fish, game forests and all other wild life resources of Missouri, and will sponsor a movement for creation by constitutional amendment of a non-partisan commission of four to administer the state's restoration and conservation program.

The amendment will be submitted to the voters in the 1936 general election upon initiative petition which will be circulated soon by the federation.

E. Sydney Stephens of Columbia was elected president of federation at yesterday's session, and provisions were made for other officers to be elected at a future date. Stephens was empowered to name a committee of four which will draft the constitution and by laws of the federation, and will name a board of directors of 11 one representing each congressional district in the state. The committee will write the proposed constitutional amendment, and will set up the organization which will circulate the initiative petition and organize the campaign on behalf of the amendment.

Nearly 100 representatives of various organizations, including several from St. Louis and Kansas City attended yesterday's organization session.

Stephens emphasized that the purpose of the new organization was not only to protect the state's present resources, but to restore as far as possible those that have been lost.

Stephens declared that the group had no criticism for the present administration of the state game and fish department. "Rather the meeting had commendation for the present commissioner's administration," he said, "but he like all other commissioners who have preceded him have been handicapped by the lack of permanence in his organization. It is the system that is at fault, not the man."





St. Louis businessman Roland M. Hoerr, above, originated the movement. Sedalia attorney J. T. Montgomery, right, broadened the vision of those attending the meeting.

Columbia Tribune *described the meeting when it was decided to create a non-political fish and game department.*

Stephens was empowered to appoint a committee to draft a constitutional amendment that would form a four-man, non-partisan commission to restore Missouri's wildlife and forests. The amendment would be circulated by initiative petition and submitted to the voters at the 1936 general election.

The Columbia *Tribune* wrote: "Nearly 100 representatives of various organizations, including several from St. Louis and Kansas City, attended yesterday's organization session.

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"Stephens declared that the group had no criticism for the present administration of the state Fish and Game Department. 'Rather the meeting had commendation for the present commissioner's administration, he said. 'But he, like all other commissioners who have preceded him, has been handicapped by the lack of permanence in his organization. It is the system that is at fault, not the man.'

"'With constantly changing direction and

personnel,' Stephens continued, 'it has been impossible to make proper advancement in conservation, propagation and restoration of natural resources. The proposed amendment,' he added, 'will provide a four-member, non-partisan commission, each member serving six years, and with terms so staggered that not more than two will expire in any one four-year state administration.'"

It would appear from his detailed account that Stephens already had in his pocket the proposed constitutional amendment.

We know that the amendment was drafted around the philosophy expounded by Sedalia attorney J. T. Montgomery, known affectionately as "Uncle Mon." According to Stephens, it was Montgomery who told the group that it should concern itself with songbirds as well as game creatures and should embrace forestry, which was non-existent in Missouri except for the fledgling U. S. Forest Service. He broadened the vision of the assembled group, interested mostly in animals to hunt and fish to catch, pointing out that their efforts should include the interests of all citizens in the wildlife of the state, that they would need this broad support if their efforts were to succeed.

Charles Callison has written vividly about all the machinations that went on before the meeting in Columbia in his book, *Man and Wildlife in Missouri.* Roland M. Hoerr, St. Louis industrialist and sportsman, then president of the Missouri Duck Hunters Association, had started the ball rolling by writing to Memphis writer Nash Buckingham. He asked him how Tennessee had created a commission form of wildlife administration, and if he would be willing to help Missouri do so.

Callison told how Buckingham had toured the state, sounding out various sportsmen's group leaders and soliciting their support for a statewide organization that would take Missouri wildlife out of politics. These sportsmen from St. Louis, Kansas City, Springfield, Joplin and Hannibal had concluded that the best man to head such a group should come from out-state Missouri, as an organization headed by St. Louisans or Kansas Citians would be suspect by the rural sportsmen. At a meeting in July or August 1935, they had asked Sydney Stephens if he would be willing to serve as president, and he had agreed.



Famed author Nash Buckingham, at Roland Hoerr's request, visited Missouri sportsmen's clubs to determine if they would back an effort to create a non-political fish and game department. He reported sportsmen were ready to support anything that might improve wildlife conditions.

When the group actually convened at Columbia that September day in 1935, the groundwork was laid for the future course of events.

According to Callison, the group had at first been willing to make one more legislative attempt to improve wildlife conditions, but Stephens had urged a constitutional amendment.

"If you get a law passed, what have you got?" he argued to the assembled conservationists. "The next legislature could repeal or amend it, and the politicians take over. By the same token, if you attempt to get a constitutional amendment through the legislature, you won't recognize it when it comes out.

"But if you write the basic authority exactly as you want it, put it on the ballot through the initiative and let the people vote it into the constitution—then you've got something permanent!"

Stephens' views convinced the group that it would be wasting time to make another legislative attempt, and to go instead for the constitutional amendment via the initiative petition.

One wonders if the nearly one hundred sportsmen assembled were aware that they were making conservation history as they launched their new organization. We don't even know the names, except for a handful of the leaders, of those who gathered that late summer day in Columbia. But they launched a chain of events that no other state had ever done before or since. It was a conservation milestone.

A number of elements came together at once that made conditions right for a bold step forward in conservation. The Depression had spawned a host of conservation programs, as President Franklin D. Roosevelt sought meaningful work for the vast army of unemployed. Conservation was in the air.

The U. S. Forest Service had only recently come into the state, buying up lands to create national forests. It had begun efforts to control the wildfires that swept the state each spring and fall, and was beginning some rudimentary wildlife management on the new national forest lands.

The Civilian Conservation Corps (CCC), which took young men off the streets and put them to work on reforestation, soil-erosion control and park development had also recently come into the state. The Soil Conservation Service (SCS) was just getting started.



Conservation was in the air in 1937. The state's parks were being upgraded by the Work Projects Administration and young men of the Civilian Conservation Corps, here building a trail at Big Spring Park.

The National Park Service was using Work Projects Administration people and the CCC in park development.

Only a few years before, the great naturalist Aldo Leopold had concluded his epic wildlife survey of the north-central United States, including Missouri. Now Dr. Rudolf Bennitt of the University of Missouri and his first wildlife graduate, Werner O. Nagel were working on their *Survey of the Resident Game and Furbearers of Missouri.*

The University of Missouri was about to get one of the new cooperative wildlife research units established. This was a joint federal-state-university program at land-grant colleges to fund advanced research and wildlife study. Nine states had already set up units —Missouri's was to be the tenth.

The great drought, now in its second year, had so worsened an already bad wildlife, fisheries and forestry picture that almost everyone could see that the time was ripe for some bold new program. When Roland Hoerr and his hunting companions started the ball rolling, it needed only the genius of an E. Sydney Stephens to create an avalanche.

What Manner of Man

What manner of man was this founding father, E. Sydney Stephens? To look at photos of the man, one is not particularly impressed. He was only of average height, pudgy and tending to jowls. He was virtually bald. Born September 4, 1881, he had just turned fifty-four at the time of the Columbia meeting. He was president of E. W. Stephens Publishing Company in Columbia.

Sydney Stephens died October 17, 1948. Students in the wildlife conservation class at the time remember Dr. Rudolf Bennitt, associate zoology professor at the University of Missouri, standing before the class and crying as he announced Stephens' death. What sort of man could evoke such emotion?

Dan Saults, former Information officer and assistant director for the Department, once wrote that Stephens came from the "Missouri Valley Bourbons, the old families that reigned over the geographical, financial and cultural core of Missouri."

Public service came naturally to him. His father had been active in public affairs, and a brother of Sydney's, Hugh Stephens, became a Jefferson City banker and headed the Citizens Road Association, which in the 1920s and 1930s sponsored movements leading to the state's modern highway system.

Sydney Stephens was brought up in comfortable circumstances and given the advantages of a well-to-do youngster. He attended Missouri University and Harvard where he had been a classmate of Franklin D. Roosevelt. He cultivated a Harvard pose of casual urbanity: mannered, witty, detached. Like FDR, he used a long cigarette holder, which he flourished as he talked.

Charles Callison said: "I would apply the word 'urbane' to Syd Stephens. He was a very charming, cultured gentleman that I think many people would be surprised to find in a little town like Columbia, Missouri.

"He was a polished man, with a good sense of humor, a great storyteller with a fine feel for the language, written or spoken.



E. Sydney Stephens, chosen as leader in the drive for a non-political fish and game department, had a long history of public service.

His motivation in conservation came out of the fact that he was a hunter. He was a quail hunter and a waterfowl hunter. He was personally acquainted with the well-to-do duck hunting groups in St. Louis and elsewhere, people like Roland Hoerr, Russell Dearmont, Edward K. Love . . . . Syd was a hunting buddy of those people. That was the group that brought in the great outdoor writer Nash Buckingham.

"Stephens took on all the difficult public relations problems. He was a master at that.

Stephens was pretty skillful in managing the Commission, but I don't think it would be fair to say that Syd ran it all."

Callison said that Stephens once gave a speech in which he lectured the outdoor writers of the country on their shortcomings. It so impressed them that they made him an honorary life member of the Outdoor Writers Association of America, an honor that especially pleased Stephens.

Former Commission Administrative Secretary Bettye Hornbuckle Gibson said: "Sydney Stephens was the guiding light that took us through ten years and really got us established, more than any one person. One person doesn't do it all—but he had the finesse, the know-how and the dedication to guide us through that very bad period. I think somewhere along the line we have lost the understanding of how much E. Sydney Stephens contributed to the conservation movement in the state.

"Mr. Stephens said one time, 'I'll never have any money, but that's not important to me. *This* [the Department] is my swan song, my one contribution to the state I love.'

"That's the way he worked and he spent endless hours at it."

Dan Saults said: "Stephens was an aristocrat, a beautiful man, and always had beautiful manners. He never insulted anyone . . . . he did, but they didn't know it. To illustrate the kind of man he was, I sat in on a hearing on Asbury Roberts one time. [Roberts was the first Chief of Protection Division, and was fired in 1947.]

"Riley Gladden was acting agent supervisor in the east-central district, but had never been confirmed. He was called in by Stephens and Syd told him, 'Riley, I want you to tell me everything about Asbury Roberts, everything he's done.'

"Riley said, 'Mr. Stephens, I can't do it. Mr. Roberts is my boss. It doesn't matter how I may feel about him, I'm not going to say a word against him. I just can't do it.'

"I waited for Syd to send him to Kingdom Come, but he just sat there for a long time, obviously getting his temper under control. Then he dismissed Riley, curtly. I thought that Riley's future with the Department might be rather bleak.

"But next day, the first item of business was Syd saying, 'I want Riley Gladden as supervisor of agents in the east-central.' Someone brought up that Gladden didn't have much education or something, and Syd said, 'I don't give a damn whether he has a college degree or not. There's a *man*!'

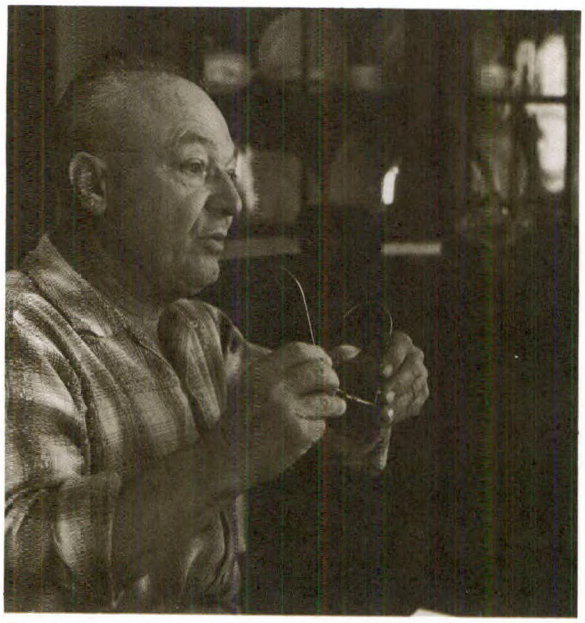
"I went away with a heightened opinion of both men.

"Rudolf Bennitt and Stephens were only acquaintances before the campaign started. Then they became close friends. And Stephens listened to Eugene Poirot expound on soils and trace elements when nobody else was paying much attention to his findings. Dr. William Albrecht [University of Missouri soil scientist] was probably an important figure in Stephens' staff. He apparently called the group his 'kitchen cabinet.'"

Stephens was an early exponent of the relation of soils to wildlife and forestry, and this became a cornerstone of future programs of the Department, possibly the first conservation department in the nation to do so.



Conservation Agent Riley Gladden's reputation for integrity won Stephens' support for his promotion to the post of district supervisor in 1947.



Eugene Poirot's soil nutrition experiments, working with soil scientist William Albrecht, influenced Stephens' views on wildlife management.

Townsend Godsey, the Department's first information officer, described Stephens. "Syd was a playboy, you know. Hugh, his brother, was a staid banker. But Syd recognized public relations and was the prime motivator in producing the Department's first motion picture, *Back to Missouri*, to offset criticism of the Commission.

"Syd had a lot to do with the basic organization of the Department, and you'd never have thought of Syd as being interested in that area, either. He was just a publisher and had an old, broken-down printing department. But he was of an old family of George Caleb Bingham-Sappington tie-ups. Rudolf Bennitt had quite a bit of influence on Stephens, because Stephens respected him as being someone knowledgeable about his field. I don't think Syd was terribly knowledgeable in wildlife conservation, but he was interested in it. I would say the technical stuff flowed through Stephens from Bennitt. Stephens was a Democrat. He was a Baptist. His grandfather founded Stephens College."

Bill T. Crawford, who headed the Department's Wildlife Research Section for many years recalls, "Stephens was the only commissioner or layman who was given honorary membership in the Wildlife Society. Essentially, they called him a professional, even though he wasn't.



Aldo Leopold, the father of game management, became a close friend of Stephens, who helped him in his 1928 survey of wildlife conditions.

"Rudolf Bennitt had a lot of influence on Stephens, but that worked both ways. Aldo Leopold got in touch with Stephens when he was doing his game survey. Why? Because Stephens knew everything about Missouri.

"He went to school with Franklin D. Roosevelt. He read Leopold's *Game Management* book and was influenced by it. It taught him about the deterioration of habitat, and the worthlessness of stocking game if the habitat was gone. But the Fish and Game Department didn't pay any attention to it. So, Stephens made a great promise: 'We're going to put wildlife conservation in Missouri on a technical basis. We're going to hire people who are professionals, who know what they're doing.' And who was one of the first people he hired? Starker Leopold . . . . Aldo Leopold's son, who was working on his doctoral degree at the University of California."

Syd Stephens was primarily a hunter, and



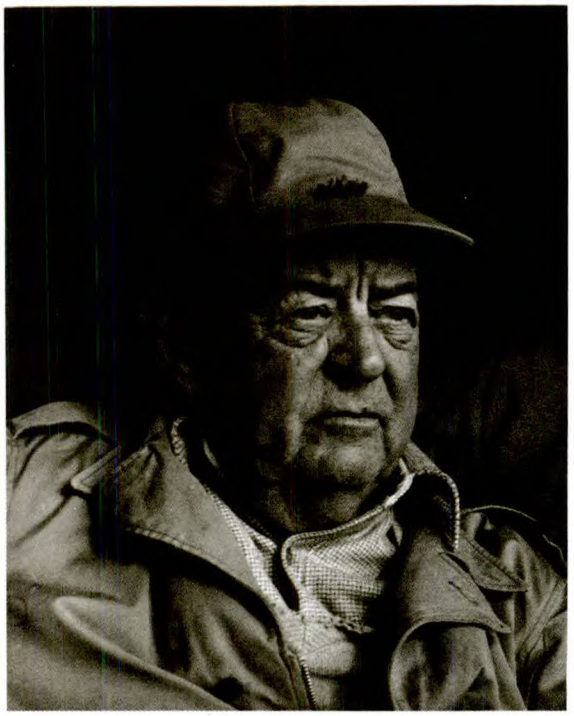
Stephens was never happier than when waterfowl hunting at the cabin near Sumner that he shared with Columbia banker, R. B. Price.

it was hunting that was his passion and what initially brought him into the conservation field. Almost every aspect of the outdoors intrigued him, but hunting was what he loved most, especially quail hunting over fine dogs, and waterfowl hunting. The decrease in animals to hunt, dramatically highlighted by the drought of the 1930s, was the spur to work for a new approach to wildlife restoration and management. Undoubtedly Rudolf Bennitt widened his interests to embrace every aspect of conservation, beyond things for his gun.

For many years he hunted waterfowl along the Missouri River with his hunting buddy, R. B. Price, Columbia banker. Occasionally he would hunt the St. Charles bottoms with St. Louis area sportsmen, and some of their club facilities made the Missouri River hunting camps he shared with Price look pretty shabby. Eventually, he and Price bought a small parcel of land that adjoined Swan Lake National Wildlife Refuge that Department Biologist A. R. Mottesheard found for them. They fixed up a comfortable cabin and Stephens was in his glory when he was entertaining friends there.

So well loved was Sydney Stephens that upon his retirement after ten years as Commission chairman a testimonial dinner was given to honor him, on September 15, 1947, at the Coronado Hotel in St. Louis. Conservation's most famous people from all over the nation came to St. Louis to pay homage to Stephens.[1]

At the dinner, it was Russell L. Dearmont of Cape Girardeau, attorney, former state



Stephens' manners won respect of associates.

[1] Among those who came to honor him were Nash Buckingham, author, sportsman and conservation leader; David A. Aylward, president of the National Wildlife Federation; J. Hammond Brown, president of the Outdoor Writers Association of America; Seth Gordon, executive director of the Pennsylvania Game Commission; Aldo Leopold, professor of wildlife management at the University of Wisconsin and philosophic guru of wildlife conservation in America; Harold Titus, author, editor and retiring chairman of the Michigan Conservation Commission; Ira N. Gabrielson, president of the Wildlife Management Institute; former governor Lloyd C. Stark; J. N. "Ding" Darling, conservation editorial cartoonist, former head of the U. S. Biological Survey and founder of the National Wildlife Federation.

senator and one of the drafters of the conservation amendment, who outlined the background of Stephens.

"While Missouri was yet a part of the Upper Louisiana Purchase, in 1819, Syd Stephens' grandfather, James L. Stephens, migrated from Kentucky and settled at Columbia. There he became a successful and prosperous merchant and, among other things, endowed the small Baptist girls' school which is today the widely known Stephens College.

"The late E. W. Stephens, following in the footsteps of his pioneer father, became one of the prominent and most influential citizens of Missouri. He founded the Columbia *Herald*, the leading weekly country newspaper of its time; established the publishing company bearing his name, which today has a worldwide business. Among many public services, E. W. Stephens headed the commission which gave to the state of Missouri perhaps the most stately and certainly one of the most beautiful state capitol buildings in the country.

"Educated in the Columbia public schools, a graduate of the University of Missouri—later a graduate of Harvard—Syd Stephens returned to Columbia, Missouri, in 1905 and became associated with his father in the E. W. Stephens Publishing Company. He is president of the company today.

"Throughout the years, he has been one of the leaders in almost every public undertaking of importance in Columbia. He has served in the Chamber of Commerce and as a member of the City Council. It is said his career almost ended in 1910 when he introduced an ordinance levying a tax of fifty cents a year on horse and buggies for use of the streets!

"Syd helped establish the Boone County Hospital—along with three drives for Stephens College building funds. He served as a member of the University of Missouri Inter-Collegiate Athletic Committee for twenty years; served as vice-chairman of seven World War I bond sale campaigns and directed the District Red Cross drive; was a member of the Missouri Memorial Tower, Stadium and Field House Committee; and has since 1918 been vice-president of the Missouri Stadium Corporation . . . .

"Other important public services, too numerous to mention, preceded his selection in 1935 as president of the Conservation Federation of Missouri, charged with the responsibility of drafting the conservation amendment to our state constitution, and organizing and directing the campaign for its adoption. The amendment was adopted in 1936 by a vote of 879,000 to 351,000—the largest majority ever received by an amendment to the Constitution of Missouri.



Plaque presented to Stephens in 1947 is now proudly displayed in the halls of the Conservation Department that he helped create.

"Governor Lloyd Stark appointed Mr. Stephens a member of the first Commission and he was reappointed by Governor Forrest Donnell for a second term. His brilliant and fearless leadership as a member and chairman of the Commission for the past ten years are well known to you all. I only add that, in my opinion, this Missouri conservation program will ultimately bring more health, happiness and prosperity to present and future citizens of Missouri than any other state directed program."

How did commission officials in other states feel about Stephens? Harold Titus, who was retiring after nineteen years as chairman of the Michigan Conservation Commission, said: "On many occasions I have talked with Missourians about Syd Stephens and have always been a little irked because of what

Sheet No. 2

WARNING

It is a felony for anyone to sign any initiative or referendum petition with any name other than his own, or to knowingly sign his name more than once for the same measure, or to sign such petition when he is not a legal voter.

INITIATIVE PETITION

To the Honorable Dwight H. Brown, Secretary of State for the State of Missouri:

We, the undersigned, citizens and legal voters of the State of Missouri and the County of St. Louis. respectfully demand that the following proposed amendment to the Constitution of the State of Missouri shall be submitted to the legal voters of the State of Missouri for their approval or rejection at the regular General Election on the 3rd day of November, 1936, to-wit:

The control, management, restoration, conservation and regulation of the bird, fish, game, forestry and all wild life resources of the State, including hatcheries, sanctuaries, refuges, reservations and all other property now owned or used for said purposes or hereafter acquired for said purposes and the acquisition and establishment of the same, and the administration of the laws now or hereafter pertaining thereto, shall be vested in a commission to be known as the CONSERVATION COMMISSION, to consist of four members to be appointed by the Governor, not more than two of whom shall be members of the same political party. The commissioners shall have knowledge of and interest in wild life conservation. Vacancies shall be filled by appointment by the Governor for the unexpired term within thirty days from the date of such vacancy; on failure of the Governor to fill the vacancy within thirty days, the remaining commissioners shall fill the vacancy for the unexpired term. The first members of said commission shall be appointed for terms, as follows: one for a term of two years, or until his or her successor is appointed and qualified; two for terms of four years, or until their respective successors are appointed and qualified; one for a term of six years, or until his or her successor is appointed and qualified. Upon the expiration of each of the foregoing terms of said commissioners, a successor shall be appointed by the Governor for a term of six years, or until his or her successor is appointed and qualified, which term of six years shall thereafter be the length of term of each member of said Commission. The members of said Commission shall receive no salary or other compensation for their services as such. The members of the Commission shall receive their necessary traveling and other expenses incurred while actually engaged in the discharge of their official duties.

Said Commission shall have the power to acquire by purchase, gift, eminent domain, or otherwise, all property necessary, useful or convenient for the use of the Commission, or the exercise of any of its powers hereunder, and in the event the right of eminent domain is exercised, it shall be exercised in the same manner as now or hereafter provided for the exercise of eminent domain by the State Highway Commission.

A Director of Conservation shall be appointed by the Commission and such director shall, with the approval of the Commission, appoint such assistants and other employees as the Commission may deem necessary. The Commission shall determine the qualifications of the director, all assistants and employees and shall fix all salaries, except that no commissioner shall be eligible for such appointment or employment.

The fees, monies, or funds arising from the operation and transactions of said Commission and from the application and the administration of the laws and regulations pertaining to the bird, fish, game, forestry and wild life resources of the State and from the sale of property used for said purposes, shall be expended and used by said Commission for the control, management, restoration, conservation and regulation of the bird, fish, game, forestry and wild life resources of the State, including the purchase or other acquisition of property for said purposes, and for the administration of the laws pertaining thereto and for no other purpose.

The general assembly may enact any laws in aid of but not inconsistent with the provisions of this amendment and all existing laws inconsistent herewith shall no longer remain in force or effect. This amendment shall be self-enforcing and go into effect July 1, 1937.

Each person signing this petition for himself or herself says:

I have personally signed this petition; I am a legal voter of the State of Missouri and the County of St. Louis and the above named Congressional District; my residence and postoffice are correctly written after my name.

	NAME	RESIDENCE (If in a city, give street and house number. If not, give town or township in which signer resides.)	POST OFFICE (Give name of city and state. If not in city, give rural route, including town and state if different from residence.)
1	F M Allen	130 Plant av	Webster Groves Mo
2	G L Stephens	4715 Pulcot ave	St Louis Mo.
3	R B Brighton	1123 Woodlands Dr.	Richmond Hts, Mo

impressed me as a spirit of unduly proprietary interest in Syd Stephens, when up in Michigan we feel that he partially belongs to us, and in all the other states from Maine to California, from the Great Lakes to the Gulf—people think that Syd Stephens belongs to *them*!"

J. N. "Ding" Darling, of Des Moines, paid tribute to Stephens' leadership ability by saying: "It was a surprising thing that happened in Missouri all of a sudden ten years ago. Along with the Stephens' leadership, other giants in the field of conservation seemed suddenly to spring up from the Missouri soil.

"They appeared in the state university, the state agricultural college, in the press, and among the people there was a new vigor of interest in conservation. A state federation was born and a governor with an understanding of the principles of conservation was elected. That was Governor Stark and without his understanding and sympathy toward the statewide program, much of the progress so gloriously achieved might have had much tougher sledding.

"Rudolf Bennitt and professor W. C. Etheridge became recognized national leaders among the research scientists and soil conservationists and, as if by common consent, the country press and the schools joined the statewide evangelism. Thus, in ten years' time Missouri has become not only the envy but the goal of nearly all the states in the union in its methods and management and application of conservation principles.

"And I cannot close the list of Missouri's



Two of conservation's elder statesmen, J. N. "Ding" Darling, conservation cartoonist, and E. Sydney Stephens, share a moment at the testimonial dinner for Stephens in September, 1947.

accomplishments without mentioning your wisdom and good fortune in the selection of your executive director—I. T. Bode. If there had been a better man in the country for the job, Sydney Stephens would have hired him."

Conservation's greatest philosopher, Aldo Leopold, summed up the importance of Stephens' contributions. "What Sydney Stephens has done for conservation in Missouri (and through Missouri's example, for conservation in North America), is by this time so ably expounded that I shall address myself to the converse question: what should Missouri do to ensure the continuance of Sydney Stephens' work? . . . .

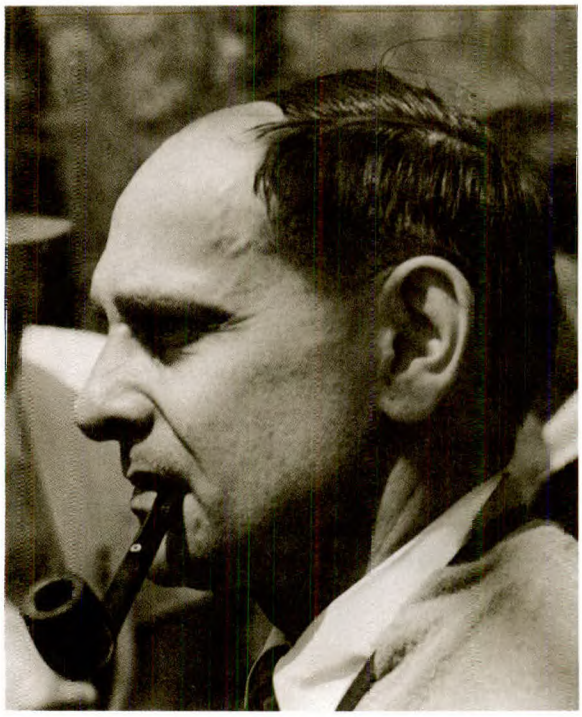
"Frankness compels me, first of all, to point out that it is not unusual for a state to fall down on the job after an able leader has retired from active service. It is in the nature of leadership to inspire people to build better than they know. The crucial question is: what are the usual causes of falling down? If Missouri can be on her guard against the errors that have caused recessions of progress in other states, she will, to that extent, have ensured the continuance of the Stephens momentum. (I use that term deliberately, for few states have come as fast and as far as Missouri has under his leadership.)

"I am too old a hand to think I know the complete answer, but I will venture to list briefly some of the dangers that beset any state which is trying to make conservation a living reality.

"Of first importance is a sustained high



Dr. Rudolf Bennitt was Stephens' advisor and friend, and served as a technical advisor to the new Conservation Commission. Many of Bennitt's wildlife students later worked for the Commission.



Irwin T. Bode in 1938 was at the height of his powers as organizer and administrator of the revolutionary new Department of Conservation.

average of quality commissioner appointments. It is incredible how much harm can arise over a period of years from even ten percent bad selections. Appointments can average no better than the governors who make them, or than the legislators who confirm them, or than the voters who elect both.

"Another danger arises from the misconception of who is the 'conservation public.' Because sportsmen make most of the noise and pay most of the bills, it is easy for a commission to forget other groups. One of the earmarks of statesmanship in Sydney Stephens' regime was his early recognition of the landowner and farmer as the ultimate prime mover in conservation.

A third danger arises from insufficient width-between-the-ears in the average citizen-conservationist, who is too often willing to buy success (real or fancied) in his own pet resource by selling others down the river. I am going to be specific here because my scars still itch. I come from a state where the deer hunters and resort owners insist on maintaining a top-heavy deer herd at the expense of the future forest, at the expense of all the other wildlife that inhabits the deer range, and at the expense of the ultimate welfare of the deer themselves. Missouri has equivalent problems—every state has them. These problems raise the basic question: should a commission give the public what it wants, or what it needs? Again the earmark of statesmanship: Sydney Stephens always aimed steadfastly at a high proportion of actual needs, and somehow made the public want them. That sounds simple, but if anyone thinks it really is, just try it sometime.

"A fourth danger is the tendency, latent in any state, for administration and research to draw apart, or to lose track of each other. Show me a state where these two look down their noses at each other, and I show you a state coasting down a blind alley. To keep knocking these two heads together is one of the most important duties of any commission. To knock heads gracefully, a commissioner must be a good friend of both, and must critically appraise both. Sydney Stephens has always been the good friend of both, and he has never lost his capacity for critical appraisal. His 1946 speech, 'Where are We, and What Time Is It?' is a milestone in conservation statesmanship.

"I could extend this list much further, and in each case point out some new earmark of sagacity, foresight and courage in the man we honor tonight. I need not do so, for we who love him need no convincing. What we do need is assurance of Missouri's sagacity, foresight and courage in the years to come. I have mentioned four pitfalls of policy which Missouri might step into; let me now avow the belief that if conservation can become a living reality anywhere, it can do so in Missouri. This is because Missourians, in my opinion, are not yet completely industrialized in mind and spirit, and I hope never will be.

"Conservation, at bottom, rests on the conviction that there are things in this world more important than dollar signs and ciphers. Many of these other things attach to the land, and to the life that is on it and in it. People who know these things have been growing scarcer but less so in Missouri than elsewhere. This is why conservation is possible here. This

is what Sydney Stephens' teaching adds up to. This is why land-minded Missourians can, if they will, build on the foundations Sydney Stephens has laid down for them."

A bronze plaque was presented to Stephens, which is now proudly displayed at the Department he loved.

Stephens retired from the Commission at the end of June, 1947. The new Commission voted to honor him with the Master Conservationist Award and I. T. Bode wrote, on August 22:

> Dear Mr. Stephens:
>
> It is with sincere pleasure that I inform you of your selection for receipt of one of the Master Conservationist Awards for 1947. It is planned to have the presentation of Awards for 1947 at the testimonial Dinner which is to be given for you in Saint Louis the evening of September 15, and it would be appreciated if you would indicate your willingness to accept the Award at that time.
>
> Dr. [Forrest Olin] Capps will no doubt contact you in the near future to determine which type of Award you prefer—the lapel pin or the watch charm.
>
> My sincere congratulations on your selection for this well deserved Award.
>
> Very truly yours,
>
> I. T. BODE

Attached to this formal letter was a handwritten note:

> This is the formal notice. But, my Lord, how I'd like to tell you what my old heart wants to say.
>
> The award has never been granted to one more deserving of the title it carries.
>
> God bless you.
>
> Bode

And penciled alongside were the words: "Me, too. Bettye."

It was that kind of respect and admiration that Syd Stephens generated in the hearts of those who knew him.

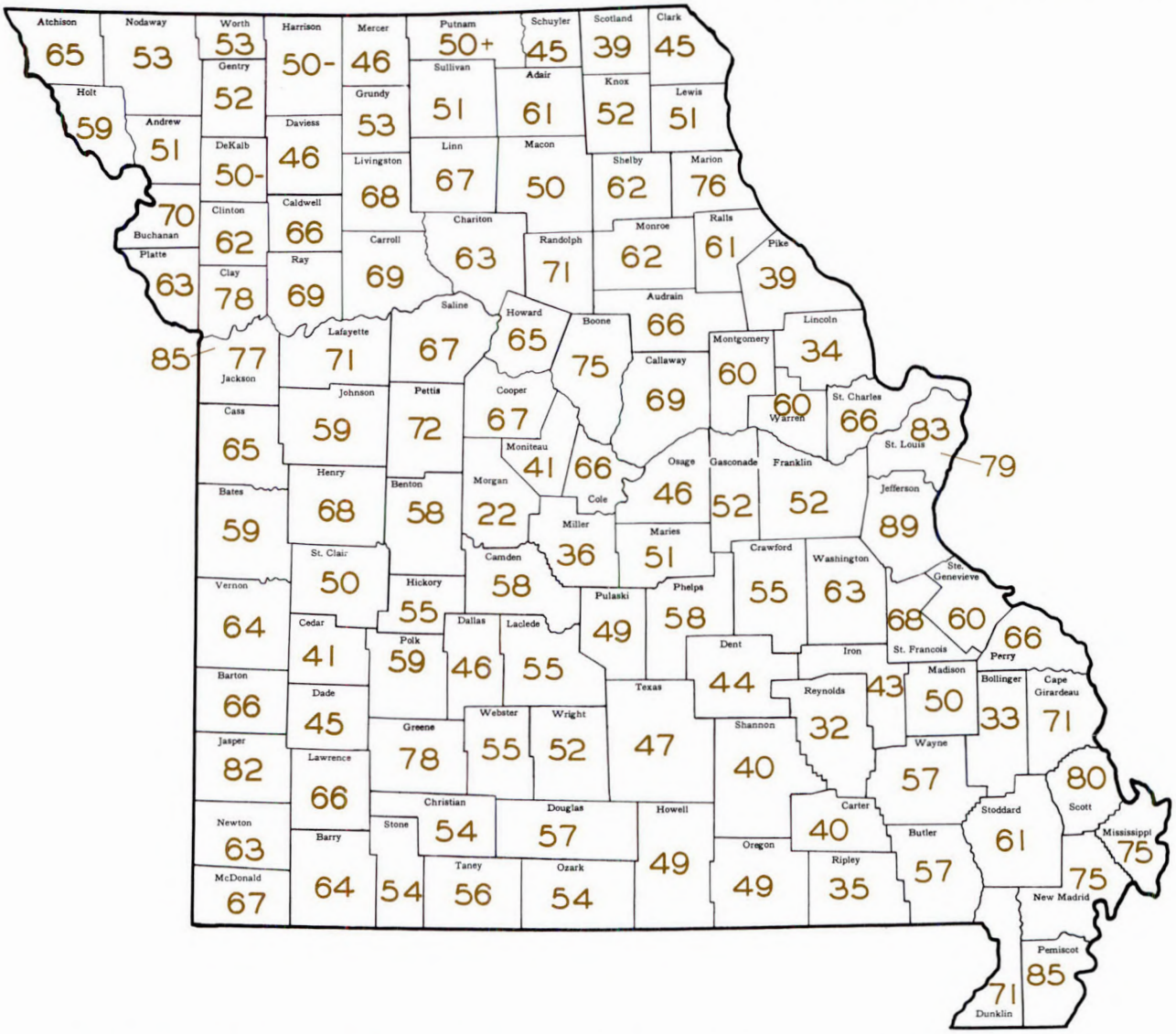


Five men who contributed much to Missouri's conservation progress: Robert A. Brown Jr., Aldo Leopold, J. N. "Ding" Darling, E. Sydney Stephens, and Edward K. Love at testimonial dinner, September 15, 1947, in St. Louis.

How Do You Start One of These Things?

On the first day of July, 1937, E. Sydney Stephens was confronted with the necessity of coming up with some sort of organization. Amendment No. 4 had passed by a sizable majority, indicating that the public was ready for a non-political, scientifically-based wildlife and forestry program. But how do you go about starting one?

It's a good bet that Stephens had many discussions with Dr. Rudolf Bennitt, associate zoology professor at the University of Missouri. The two had become good friends during the months prior to passage of the amendment. Bennitt was a major advisor on the programs



The percent of YES vote by counties for Amendment 4, creating the Conservation Commission, November 3, 1936. Total YES vote was 879,213, and the NO vote 351,962.

envisioned by Stephens, but Bennitt was a college professor, with no experience in organizing a department of state, nor in handling the day-to-day operations of such a body.

Stephens was a businessman who had run an organization, but a publishing firm is not a government agency, and Stephens had in mind breaking entirely new ground. There was a new science available, though in its infancy. It was called "wildlife management," and Stephens meant to base his new Department solidly on its foundation of theory and fact.

Governor Lloyd C. Stark took a keen interest in the new concept, but delayed announcing the appointment of a commission until the amendment became effective, July 1, 1937. On June 23, 1937, he called a conference of interested sportsmen and conservationists in Jefferson City. At a luncheon in the governor's mansion, Stark made public an opinion given him by Edward C. Crow, special counsel in the office of the attorney general, holding that the constitutional amendment approved by the voters was self-enforcing and that no enabling legislation by the legislature was necessary. It said the commission had full power to take over the control and regulation of the restoration and conservation of birds, fish, game, forestry and all wildlife resources of the state.

The opinion held that the commission would have authority to enforce all laws now on the books relating to conservation activities, to receive all funds from hunting and fishing licenses and other sources, and to expend those funds without appropriation by the legislature. It also said that any laws which "interfere with conservation" are automatically repealed. Stark said he would announce his appointments to the four-man commission later, and that he also would name an advisory committee to aid the new Conservation Commission in formulating its policies.

Governor Stark called for subordination of "personal differences, prejudices and animosities to the main objective and common good.

"There is no difference between us with regard to the importance of this work. There is no doubt the people of this state demand



Zoology professor Rudolf Bennitt was an expert in wildlife management and became the technical advisor to the new Conservation Commission.

that our game and fish resources must be protected and restored without delay. They insist that our remaining forests be saved from destruction by proper care and scientific replenishment . . . . they desire that our beautiful streams and other natural resources shall be protected from exploitation and abuse . . . . to ensure this, *politics must be completely barred* . . . . we must carry out the spirit, as well as the letter of the law."

The conference suggested four points for the new commission to consider: "(1) That wildlife restoration and conservation involves a problem of proper use of land and water resources, including provision of cover, food, protection and refuges.

"(2) That properly trained personnel must be provided, with full authority to enforce conservation laws.

"(3) Proper public relations must be established. The public must be educated to the fact that conservation laws must be enforced and that conservation is not merely a matter of hatching out fish and birds to be caught and shot.

"(4) That control of streams should be

considered by the commission."

The first three points were suggested by Dr. Bennitt. The fourth suggestion was by former State Senator Langdon R. Jones of Kennett.

Possibly in anticipation of his appointment to the new Conservation Commission, Sydney Stephens moved that the group make no specific recommendations "because it would transgress the functions of the Commission."

Undoubtedly Stephens knew he was to be appointed to the new Commission, so he had some time to plan his course of action.

The first thing was for the commissioners to get to know one another and devise a working relationship. Governor Stark named the new Commission on July 2, 1937. Supreme Court Judge George Robb Ellison administered the oath of office in Gov. Stark's office.

Appointing former Fish and Game Department Commissioner Wilbur Buford to that first Conservation Commission was a master stroke. It headed off political pressure to get Democrat Buford appointed the first director of the new Department. It also assured the loyalty of Fish and Game Department employees, who would have to carry on operations until the new Commission could get its bearings, and his four years experience running the Department would be useful to his successor.

Republican Albert P. Greensfelder, St. Louis businessman and member of the State Planning Commission, was deeply interested in forest and stream preservation when he was appointed to that first Commission. Of him the *St. Louis Post-Dispatch* said: "While he has not been prominently identified as a sportsman, it is also true that the conservation amendment is designed to conserve and restore all forms of wildlife, not alone those types which interest sportsmen."

The fourth commissioner was Republican John F. Case, editor of the *Missouri Ruralist* and widely known farm leader. His appointment was valuable because the success of conservation programs was going to be dependent in large measure on the attitude of farmers.

Stephens and Buford were appointed for four-year terms, Case to a two-year term and Greensfelder to a six-year term. Governor Stark "suggested" that Stephens might make a good chairman and Greensfelder a vice-chairman, and the new Commission agreed.

The Commission held its first meeting immediately in the governor's office. They elected Stephens chairman, Greensfelder vice-chairman, Buford secretary and Case member.

They named Jefferson City native Joel Frank Ramsey, president of Ramsey Tie and Timber Company, acting director with a salary of $300 per month. Ramsey was also to serve as acting director of state parks. Buford offered to remain in Jefferson City during the month of July to assist Ramsey in taking over the duties of acting director.

Ramsey recommended, and the Commission approved, retaining Fish and Game Publicity Director E. L. Preston and Bruce Lewis, former assistant chief of parks, as refuge inspector. All employees of the Fish and Game Department were to be retained temporarily,



Joel Frank Ramsey was president of a tie and timber company when named as acting director. Later he was assistant director and chief of the Administrative and Protection Division.



The Conservation Laboratory on the northwest corner of MU's White Campus housed the new cooperative Wildlife Research Unit. It was later renamed Stephens Hall honoring E. Sydney Stephens.

at the pleasure of the Commission, in their same capacities and salaries.

Buford moved that all monies arising from the operations of the Commission should hereafter be designated as the "Conservation Commission Fund." The acting director was asked to secure stationery, a seal, and to continue the rental of quarters for the Conservation Commission. He was authorized to make requisitions and purchases.

Dr. W. C. Curtis of the University of Missouri appeared before the Commission to explain the opportunity offered the state to secure a wildlife research and game management station through the Federal Bureau of the Biological Survey. Greensfelder moved to make an annual commitment not to exceed $6,000 annually for the use of such a research station at the University of Missouri, with Stephens to represent the Commission. This was the beginning of the Missouri Cooperative Wildlife Research Unit.

Greensfelder then moved to accept the offer of Dr. Rudolf Bennitt to serve as technical adviser to the Commission. Regular meetings were scheduled for 10 a.m. the second Monday of each month, and members of the Advisory Committee were invited to sit with the Commission from time to time.

As a last item of business at that first meeting, it was agreed that Stephens was to conduct the search for and investigation of individuals who might be qualified to serve as a director.

Acting Director J. Frank Ramsey had been born in Cedar City, a suburb of Jefferson City, and raised in mid-Missouri. Ramsey's father had started the family lumber business, which was just about on its last legs at this time, a victim of the Great Depression. He had grown up in the business, traveling as a buyer over much of the state, and in the

course of his travels had learned a great deal about the state's dwindling forest and wildlife resources.

Ramsey was an ardent sportsman and member of the locally famous Painted Rock Club, a resort of Jefferson City nimrods located on the Osage River. Only a year before he had been seriously wounded by a companion in a deer hunting accident at Painted Rock.[1]

He was a close friend of Governor Stark, who probably called him to the attention of Stephens and the other commissioners. In any event, he was available to serve as director until a permanent one was found, and had experience as an administrator.

The Jefferson City *Post-Tribune* said of him: "When it was announced that the Conservation Commission had named him as the first director everybody, regardless of politics, applauded. A man had been chosen who typified good sportsmanship . . . . Frank Ramsey's first job as a boy took him through field and forest and along the streams of his native state. There he had an opportunity to study wildlife which then abounded in Missouri. He came into contact with the killer who nearly exhausted the state's rich resource before the people wisely wrote conservation into the constitution.

"Ramsey fought game destruction long before it was discussed as a public question . . . . He came to the office of conservation director with a knowledge gained in his travels through the state. Many regretted that he was not retained in that position."

In September, L. F. Tatum, administrative assistant for the U. S. Forest Service in Missouri, told the Commission that it needed a Forestry Division to take advantage of federal Clark-McNary Act funds available to the state. Acting Director Ramsey was ordered to work with Tatum in preparation of a five-year forestry plan.

U. S. Forest Supervisor Paul V. Kelleter reported the plans and activities of the Forest Service with respect to wildlife, which included creating water holes for animals, food plantings, creation of refuges, trapping and



NAMED RAMSEY DIRECTOR OF CONSERVATION

New Commission at First Session Gives Jefferson City Man Place

STEPHENS ELECTED BOARD CHAIRMAN

Body Follows Governor's Suggestion In Election and Appointment

Frank Ramsey of this city, was named today acting conservation director by the new conservation commission at its first meeting.

Ramsey will serve as head of the new non-political game and fish regulatory body until he is appointed for the permanent post or his successor is chosen.

Following the suggestion of Governor Stark, the commission made E. Sydney Stephens of Columbia, chairman; A. P. Greensfelder, St. Louis, vice chairman, and Wilbur C. Buford, former game and fish commissioner, secretary; John F. Case, Wright City, is the other member of the board created by a constitutional amendment to supplant the old game and fish department.

The commission voted to empower present game wardens to enforce laws and regulations and all employes of the old department were told to stay on their jobs in their present capacities.

The group also voted to establish a game management commission to experiment with the propogation and protection of game birds and animals if the federal government and the University of Missouri will cooperate.

Each of the agencies would contribute $6,000 to the project under the plans adopted today.

Mr. Ramsey, a life-long resident of Jefferson City, has been in the railroad tie contracting business for years.

He has always been considered an authority on wild life conser-

Jefferson City Post-Tribune *reported selection of Ramsey as director and Stephens chairman of the Commission, at Governor Stark's suggestion.*

[1] Painted Rock State Forest was acquired by the Department of Conservation as a public wildlife area in 1981.

moving deer, and the importation of deer from Wisconsin and Minnesota.

Also at the September meeting, Stephens told the Commission that he had secured a list of national conservation authorities from Rudolf Bennitt, and had solicited names of possible directors from those notables.[2]

Stephens had sent the names of possible directors to the authorities, with the request that they rank them in order of their preferences. He pointed out to the Commission that although residents of Missouri had applied for the directorship, none of them was approved or rated by the wildlife experts.

The Commission decided to invite the following individuals for interviews: Leslie Bean, assistant regional forester, U. S. Forest Service; Paul V. Brown, regional director, National Park Service; Joe A. Grant, recreational project manager, National Park Service; Aldo Leopold, S. B. Locke, Seth Gordon, H. D. Ruhl, J. C. Salyer, Bureau of Biological Survey, Peter J. Hoffmaster, director of the Michigan Conservation Department and Irwin T. Bode. Others were also to be invited to a conference in St. Louis to advise the Commission on its proper activities and the qualifications of a director.

The group met September 25 at the Missouri Athletic Club in St. Louis. Those actually attending, besides the Commission, were Aldo Leopold, H. D. Ruhl, Paul V. Brown, Lisle Watts, Leslie Bean, Nash Buckingham, S. B. Locke, Joe A. Grant and Dr. Rudolf Bennitt.

The conference was a round table discussion, resulting in the suggestion the Commission should engage in five major activities: (1) research, including scientific investigation into the causes of the decrease in wildlife in Missouri and the means by which such wildlife might be restored, (2) that the Commission should engage in the propagation of game, fish and forests and that individuals trained in those fields should be employed. (This activity, it was agreed, should include game management, fish management and reforestation), (3) that the Commission should set up an enforcement division headed by a man trained in that field and composed of individual staff members carefully selected and



Paul V. Kelleter, supervisor of the Missouri national forests in 1937, took an active interest in the new Conservation Commission and helped get the Department forestry program started.

[2] The authorities Stephens consulted were: Herbert L. Stoddard, Cooperative Quail Study Association; F. C. Walcott, president of the American Wildlife Institute; H. W. MacKenzie, Wisconsin director of conservation; Ira N. Gabrielson, chief of the Bureau of Biological Survey; Gardiner Bump, superintendent, Bureau of Game, New York; Earl H. Clapp, acting chief of the U. S. Forest Service; Judge George W. Wood, president of the Izaak Walton League of America; Victor H. Cahalane, chief of the National Park Service; Aldo Leopold, professor of game management, University of Wisconsin; Jay N. Darling, president of the General Wildlife Federation; H. D. Ruhl, Game Division, Michigan Department of Conservation; S. B. Locke, conservation director, Izaak Walton League of America; I. T. Bode, senior biologist, U. S. Department of Agriculture; Seth Gordon, executive director, Pennsylvania Board of Game; Ernest G. Holt, secretary of wildlife management, Soil Conservation Service; William L. Finley, vice-president, General Wildlife Federation; Arthur A. Allen, professor of ornithology, Cornell University; Carl P. Russell, Wildlife Division chief, National Park Service; Gifford Pinchot, ex-governor of Pennsylvania, and Henry P. Davis, secretary, American Wildlife Institute.

fully trained, (4) that the Commission should engage in the undertaking of restoring the forestry and timber interests of the state, not only in wooded areas and on publicly owned lands but on privately owned farms as well, and that in charge of that activity the Commission should place a man technically trained in forestry, (5) that the Commission should conduct the activity of public relations, with particular reference to education and farmer participation in wildlife conservation. (6) It was also agreed that the director "should be a man with sufficient technical training and experience to enable him to advise the Commission as to its activities and functions, and with sufficient acquaintance with experts in the various fields to be able to recommend for employment technically trained men."

The Commission adopted these suggestions and the next day interviewed Grant, Leopold, Bean, Brown, Ruhl, Buckingham and Locke as possible directors. Four others invited, but not at the meeting, were scheduled for later interview: Hoffmaster, Bode, Salyer and Gordon. Salyer's name was later dropped.

On October 11, two men remained in the running for director, Peter Hoffmaster and Irwin T. Bode. The Commission authorized Stephens to offer the job to Bode at a salary of $6,000 per year, and on November 15, 1937, he accepted the post.

Apparently Bode's employment was for a four-year term, because in January, 1942, he was "reappointed for another four-year term."

Bode asked that J. Frank Ramsey be retained as "assistant to the director until such time as the permanent organization is effective."

With the employment of Bode, things were really under way.



Irwin T. Bode, senior biologist with the U. S. Department of Agriculture, was chosen as the Conservation Commission's new director. Bode had started a reorganized department in Iowa in 1932.

Irwin T. Bode

Irwin T. Bode was forty-six years old when he came to the Missouri Department of Conservation. He was born in Keokuk, Iowa, in 1891 and grew up there. In 1915 he took his bachelor of science degree in forestry from Iowa State College, where he had been active in student affairs, was coach of the college gym team, and held student assistantships in the forestry and botany departments.

After graduation he got a job in the Indian Service as a forester, but that was of short duration. He transferred to a job in Hays, Kansas, supervising an experimental forest nursery there. He left that to enlist in the Army during World War I, and served in the field artillery.

After military service he returned to Iowa State, teaching on the forestry faculty while earning his master's degree. In September, 1921, Iowa started an extension forestry program and Bode had charge of organizing it and served as state extension forester for eleven and one-half years. There is also an indication in the records that he served as director for two years of the American School of Wildlife Protection at McGregor, Iowa, during this period. This undoubtedly was a moonlighting job.

In 1931, J. N. "Ding" Darling led a fight to take conservation out of politics in Iowa and was successful in getting a bi-partisan conservation commission established—the first such in the United States. In February, 1932, Bode took on the job of organizing this agency as chief executive for that commission, presaging his later work in Missouri.

Bode remained there only three years, leaving in July, 1935, to accept a post—at the invitation of J. N. "Ding" Darling—with the U. S. Biological Survey in Washington as organizer of the cooperative wildlife research units. Research units were a concept of Aldo Leopold's, who felt that game management needed its own scientifically trained men. Up to this time, such wildlife workers as there were came from the ranks of other disciplines—foresters, entomologists or other biological interests.

Darling had taken Leopold's concept and created a cooperative research unit at Iowa State, with the Iowa Conservation Commission putting up one-third of the cost, the University providing services and materials as its one-third, and Darling dug into his own pocket to come up with the rest.

When he went to Washington as head of the U. S. Biological Survey, Darling brought the wildlife research unit idea with him, and in 1935 succeeded in getting the Sporting Arms and Ammunition Manufacturers Institute (SAAMI) to put up one-third of the cost of setting up research units at land-grant colleges. State conservation agencies and the land-grant colleges contributed the other two-thirds.

He asked Bode to help organize this program when the federal government took over the SAAMI funding role in 1936, and research units were established at land-grant colleges in nine states. Missouri became the tenth state to establish a cooperative wildlife research unit after Bode became director here.

The U. S. Department of Agriculture got interested in the new field of wildlife management about this time and hired Bode away from the Biological Survey in November, 1936, to organize wildlife conservation in its Extension Service. He was serving as senior biologist with the U. S. Extension Service when he was selected to become director of conservation for the new Missouri Conservation Commission in November, 1937.

Looking at his career, it is apparent that Bode had a lot of experience in organizing new programs, and most of his career had been concerned with extension-type work. This was to color his thinking as he organized the Missouri program, and a number of early Missouri Department employees came from extension backgrounds.

The Department of Conservation has been fortunate in having directors with the

WASHINGTON MAN TO WILDLIFE COMMISSION

Irwin T. Bode Named to Succeed Ramsey

ST. LOUIS, Oct. 15 — (AP) — Missouri's conservation commission made ready to day to turn over its affairs Nov. 15 to Irwin T. Bode of Washington, D. C., chief conservationist of the bureau of biological survey, permanent director.

Bode's appointment was announced late yesterday by E. Sydney Stephens, chairman of the newly created commission. He will succeed Frank Ramsey of Jefferson City, who was named as acting director last July.

The new director will administer the wild life amendment to the state constitution, adopted by the voters last November. The amendment created the conservation commission, giving it broad powers in all conservation matters as well as complete fish and game control.

In selecting the new director, the commission followed the suggestion of Gov. Lloyd C. Stark, who several months ago said he believed the state should choose one of the experts of the federal conservation service as director of the commission. At that time he said he knew of no one in Missouri who was qualified to meet the specialized requirements of the position.

Jefferson City paper announced Bode's appointment.

qualities needed for the times. In Bode's day a new, weak Department needed to gain its independence and to prove itself. Conceived as an agency based on science and freedom from political preference—and interference—Bode fought for recognition of that fact. He tried to hire the best technical staff available at the time, and he urged his technicians to plan the future of wildlife and forestry. Bode believed in long-range planning, which would have been inconceivable if personnel were to turn over every four years.

Bode shunned politicians, insofar as he could. He much preferred that the Conservation Federation stand between the Department and the legislature, and never went before legislative committees unless summoned. Where most department directors appeared at budget hearings to defend their programs and funds requested, he sent Montie Glover, his fiscal chief. No employees were allowed to participate in or even discuss politics. A quick way to get turned off was to introduce one's self as a "friend of politician so-and-so." Under Bode, any preferment a politician might expect simply wasn't there. They got the same courteous treatment any other citizen would get.

The same wasn't necessarily true of politicians' treatment of Bode. Some representatives and senators played a rough game when they summoned Bode before their committees. After an hour or two of verbal abuse, which he bore with stoic fortitude, Bode would smile that tight little smile of his and shake their hands as he departed. What such scenes must have cost him inwardly one can only guess.

Bode was so determined to keep the Department out of politics that it was almost an obsession with him, and one wonders if he had not been burned politically when he was director in Iowa. Darling's efforts to take that commission out of politics did not have a long-lasting effect.

Along those lines, Joseph Jaeger Jr., who had been a forester with the Department for a number of years, had an interesting anecdote about Bode.

"I had this opportunity where the Park Board wanted to hire me as director of parks," Jaeger said. "There were three Republicans



Irwin T. Bode had a history of successful development of new programs before he became director of Missouri Conservation Department.

and three Democrats on the Park Board, and they thought I ought to go over and pay a courtesy call on Governor Donnelly, which I did.

"Then I went by headquarters on High Street and went by Mr. Bode's office to thank him and tell him that I was going to be chief of parks . . . . and I got my ass chewed out! For leaving a good Department to go with a political thing like that. Instead of saying 'I'm glad to see one of my personnel take charge of' . . . he was upset about it."

At forty-six years of age, Bode, with his forestry training and background, appeared backward and old-fashioned to the very junior wildlife biologists, fresh out of college and eager to spread their wings. But they stood in awe of him, too.

Arthur Hugh Denney, one of the early biologists, said, "Bode was a good man for the time. He had a bulldog tenacity of staying with what he believed in. He probably took a lot of unfair abuse, but at a time when it took a dedicated leader, he was a practical manager and public administrator."

Another one of those early biologists, Allen Reed Twichell recalls, "Bode wasn't very easy to know. He had a stack of papers he was signing as he interviewed me for the job. 'What do you know about conservation?' he asked, as he continued to sign those papers.

"I made a little speech and he asked a few more questions. I don't think he'd have recognized me later; just kept signing those papers. We young guys thought he was old-fashioned and backward, but he was a lot older than we were. I think he was good at a time when we needed somebody to lay down the law to the legislature. He leaned over backwards about not fraternizing with the legislature."

Bode had his own ideas about how things should be done, and this sometimes caused differences with strong-willed employees with ideas of their own.

Townsend Godsey, first Department Information chief, eventually resigned because he couldn't get along with Bode.

"Bode was distrustful of newspaper people," Godsey said. "He had a distrust of the news media. He could be pretty dictatorial, too. That made it easy for me to pull up stakes. He definitely ran the show and didn't take much advice from anybody, but Sydney Stephens."

But others felt Bode was always receptive to new ideas. In the early days especially, ideas came thick and fast as new biologists tried their wings, and most got a cordial reception from Bode so long as they were based on facts.

Charles H. Callison, who was Information chief under Bode some time later, said, "I was always a little in awe of him and nearly everybody was. He kept himself at a distance, which is a device some administrators use. When he wanted to see somebody he would pass the word to his secretary, Bettye Hornbuckle, and she would call up and say, 'Mr. Bode wants to see you.' You were supposed to jump. Bode never called you himself, always through the secretary. Many of my colleagues would start to shake when they got that message from the front office."

Biologist Jack Stanford remembers, "He wasn't a mixer. He seemed so remote to most of us that he was like a monument out there. And in later years Bettye Hornbuckle perpetu-

ated his isolation by protecting him from others. But he had *something*, or he wouldn't have survived all those years or held us together so long."

The picture emerges of an uptight, aloof man. But others recall that when the Bodes came to Jefferson City they entered into the social swim immediately. Both were bridge players, and Bode was interested in woodworking and belonged to a group of business and government men also involved in woodworking as a hobby. Former employees Charles and Elizabeth Schwartz recall taking their youngsters and spending Christmas eves with the Bodes, who had no children of their own but enjoyed others' children. They always were gracious hosts.

Mrs. Bode initiated a social group called "Conservation Wives" that met once a month to dine and play cards. She took it upon herself to instill social graces into the wives of the young biologists and foresters, and urged them to play bridge, though she tolerated a game of rummy. She took an interest in the Department, and tried to get employees to project an image of gentility. She also was solicitous of Bode's welfare.

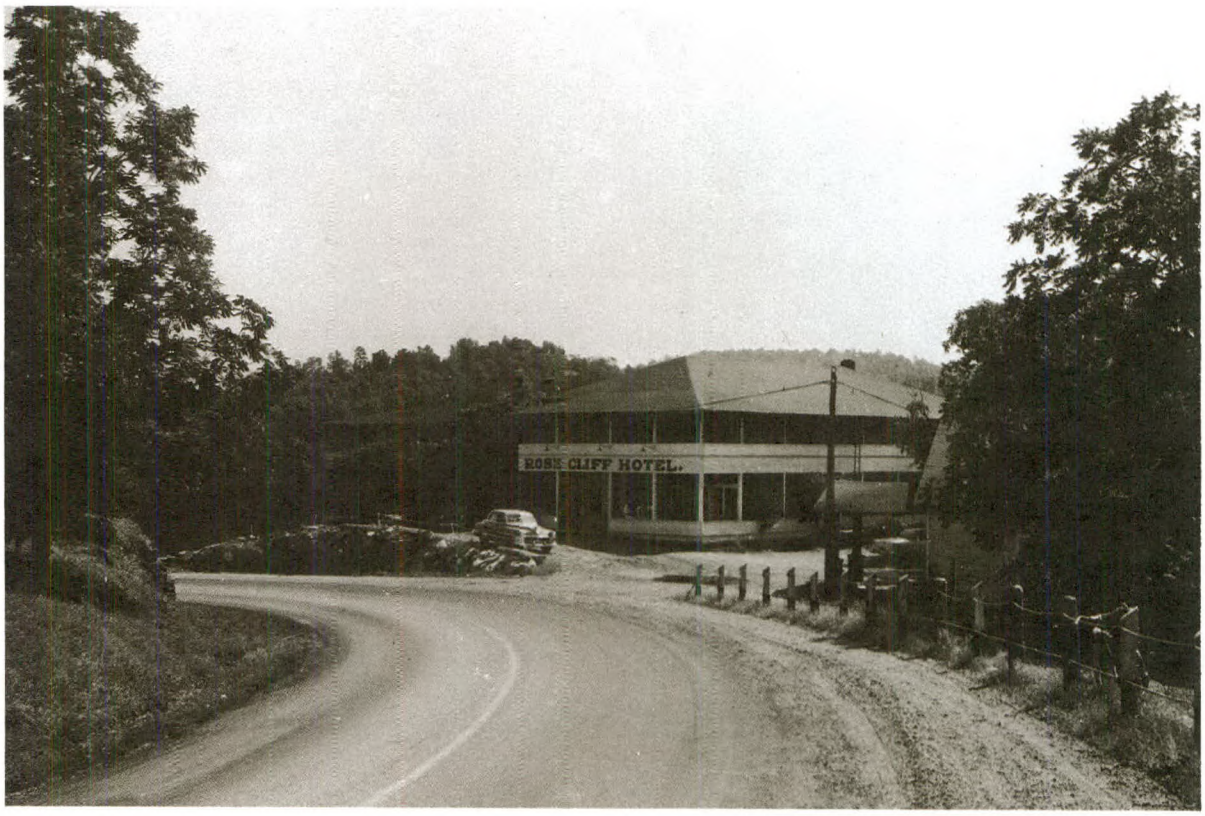
Stanford recalls a softer side to the stern facade Mr. Bode presented to most employees. "Mrs. Bode came to me one day and asked if I'd do her a favor. 'Please call him "Ping" when you're with him. It would please him so much.'"

Ping Bode was the name of a baseball player of the day and I. T. Bode was pleased to be called Ping, himself. Stanford said: "Only Jay Morrow, Montie Glover and I called him Ping, but he loved it. I called him Ping one week and the next week he called me and said, 'Let's go fishing.'"

But he was a man under terrific pressures, steering a ship that was in the process of being built as he sailed it. He distrusted politicians and was not at ease in formal situations. Biologist Hugh Denney recalls, "Arthur Clark [chief of fish and game] probably had more charm in dealing with the public than Bode ever thought of having. Bode had the technical knowledge but didn't have the charm and persuasion. Bode just didn't go over at all and we tried to *not* get Bode involved in public meetings. He could stir up as much



Jay B. Morrow became Bode's closest friend and associate and carried much of Bode's burden in latter years before his untimely death in 1956.

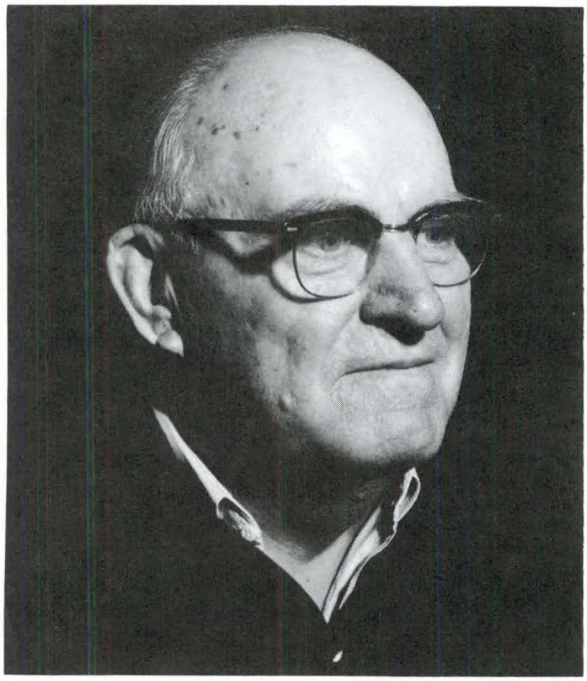


*Rose Cliff Hotel at Van Buren was a gathering place for conservationists. Proprietor/host Ben Davis (*below*) was a gifted amateur botanist.*

trouble as he could solve . . . . Bode had a temper and when he thought he was in the right, all hell couldn't sway him."

On the other hand, Biologist John "Slim" Funk remembers fondly, "We spent the night at the old Rose Cliff Hotel in Van Buren and Bode was really in his element there. We sat around on the veranda, had drinks and he was talking with some of the old-time people there, and the man who ran the Rose Cliff, Ben Davis. In a situation like that Bode was relaxed and enjoyed himself."

Davis was an interested amateur conservationist and the Rose Cliff Hotel was a gathering place for federal and state conservation workers for many years. Its screened-in porch and lobby became a sort of "Athens of the Ozarks," as the latest theories and practices of conservation were discussed there. Bode held an esteemed place in those gatherings, but Funk thought he felt ill at ease with



younger members of the Department.

The employee who got to Bode's heart was his assistant director, Jay B. Morrow. Jay was his best friend, possibly the only close friend he had. In Bode's latter years with the Department, Morrow handled most of the public meetings and took many burdens from Bode's back. Jay's untimely death of a heart attack in 1956 was a great blow to Bode.

There is no doubt Bode was an able administrator and extremely good at launching new programs. His background testifies to that. It also is obvious that Syd Stephens considered this new Department his baby, and Bode consulted frequently with him as to which course to take. A close friendship grew up between the two, and Bode genuinely felt a personal as well as professional loss with Stephens' death in 1948.

Bode's relationship with the other commissioners he worked for was never as close. Bode had a quick temper and there were some stormy sessions, with Bode threatening to resign and Stephens and Bettye Hornbuckle exercising all their charms to smooth things over.

Bettye Hornbuckle, his secretary, said Bode delegated authority. "He gave you a job and let you do it. And he was loyal to his employees. Changes in the Department in the early years were Bode's, but he worked very closely with Mr. Stephens."

Bode could be tight with a dollar, too, a trait which filtered down through the ranks so that everyone tried to wring the most they could from funds available to them. In fact, closeness (even cheapness) became a sort of fiscal trademark of the Department. In common with many others who had been scarred by the Great Depression, Bode always feared that the next year would see a downturn in fiscal fortune. Every year at budget time the instructions would come down to not anticipate any more funds than the present year's, and to include options for belt-tightening, if necessary.

One amusing anecdote about Bode's closeness with money (which, incidentally, was true of the Commission as well), concerned an employee who went to Mr. Bode and told him that he had received an offer of a job that paid $5,000 more per year than he was presently making.

"Stay with me, son," Mr. Bode told him. "I'll see that you're taken care of."

Sure enough. The following month the employee got a $5 per month raise!

Bode was respected nationwide by colleagues in conservation and served as president of the prestigious International Association of Fish and Wildlife Agencies. It is true that he was dominated by E. Sydney Stephens, whose dream this ship of state was. In order to hold his job, he was going to have to fashion and steer the ship as Stephens envisioned it.

The question arises: how much of the organization and running of the Department was Bode's and how much Stephens'? According to those who worked most closely with the two men, they shared a common dream. Bode had the practical government experience to organize and run the Department,



Bettye Hornbuckle Gibson was secretary to Wilbur Buford and became Bode's administrative assistant. She played a major role in early Department history.

and in close consultation with Stephens, they fashioned the Missouri Department of Conservation, developed its initial programs and the philosophic base upon which it still rests. They mutually fought for it in those early years of turmoil, and held it together during the lean years of World War II.

Syd Stephens may have had the dream, but it was I. T. Bode who made it a reality.

Off and Running

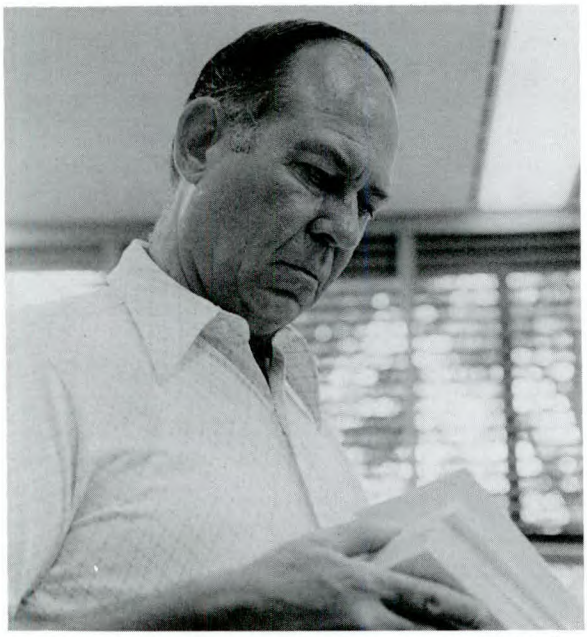
The question of organization and staffing was of immediate concern to Bode. His staff consisted of employees of the old Fish and Game Department, almost all of whom got their jobs by political appointment rather than merit. Under the political spoils system possibly the only employees who had been retained for their knowledge were fish hatchery workers, who possessed a knowledge and skill not easy to replace.

Bode had one trained wildlife biologist, Harold V. Terrill, who had been hired by Ramsey in September. He needed more biologists to get some sort of wildlife program going, and he needed someone to head up a forestry program. Both he and Stephens shared a dream of improving the position of the game warden by giving him a larger role in the management of wildlife and forests. That needed organization and personnel.

First, he drew up a table of organization and presented it to the Commission. (See next page.) It consisted of an Administrative and Protection Division under Frank Ramsey, which included a Protection Section with four regions, a Budget and Accounting Section under Montie Glover, and a future Lands and Development Section.

He proposed a Game, Fish and Forest Production Division, which included a Game Production Section under Terrill and/or Bruce Lewis, (a holdover from the old Department, now listed as a "refuge inspector"), a Fish Production Section under Dr. G. B. Herndon, and a Forest Production Section. Also proposed was an Information Service Division, which included a future Field Service Section and a future Junior Education Section.

As it turned out, the first person he hired was Francis J. Mertens as office boy. Mertens was to eventually rise to head the Department's printing and mailing functions and retire after having served longer than any other employee to date—forty-two years and eight months.



Francis J. Mertens was the first person hired by the new Conservation Commission in 1937. He was head of printing and mailing when he retired after a forty-three year career.

Apparently there was a problem with Publicity Director E. L. Preston, for in February, 1938, Townsend Godsey was hired to replace him. Godsey had been publicity director for the Fish and Game Department from 1929 to 1932 under Republican John Ross, so this was a sort of homecoming for him. Montie Glover, Bode's chief clerk, needed some assistance and H. Reed Frisbie was hired as a clerk in March, 1938.

The Department put out a call for game warden applications and by February of 1938 had received 751 applications, though it had not yet been determined how hiring would be done. W. C. Shaffer of the Pennsylvania Game Commission was invited to set up a recruitment procedure for wardens and this was approved in March, 1938. Both oral interviews and written examinations were scheduled, and from these the applicants were ranked.

Looking for help wherever he could find

COMMISSION

DIRECTOR

ADMINISTRATIVE & PROTECTION DIVISION (Ramsey)

Budget & Accounting Section (Glover)
- Budget Records & Receipts
- Accounts, Collections & Disbursements
- Property Inventories & Records (future)

Protection Section
- 4 Districts
  - Conservation Agents

Lands & Development Section (future)
- Real Estate Acquisition
- Surveys & Plans
- Improvements, Repairs
- Structures
- Maintenance
- Federal Participation Projects
- Camp Concessions
- Recreational Facilities

GAME, FISH & FOREST PRODUCTION DIVISION (Lewis & Terrill)

Game Production Section
- Refuges & Producing Areas
- Game Propagation & Distribution
- Farm Cooperative, Demonstration & Producing Areas
- Coordination with Information Service

Research
- Ashland
- University of Missouri
- Other

Federal Participation Projects
- Coordination with Lands & Development

Fish Production Section (Herndon)
- Refuges & Spawning Areas
- Fish Production & Distribution
- Public Access
  - Coordination with Lands & Development
- Cooperative Producing Projects
- Research
  - Surveys & Classification of Waters
- Federal Participation Projects

Forest Production Section (White)
- Tree Planting
- Fire Protection (Fire Guards)
- Federal Participation Projects
- Wildlife Relations
- Research
- State Forests
  - Acquisition & Management
- Coordination with Lands & Development
- Cooperation with Private Owners

INFORMATION SERVICE DIVISION

General Information Section (Godsey)
- Publications
  - (Booklets, maps, press news, Missouri news, reports, analyses of sports, revenues, seasons, use.)
- Exhibits, Visual Aids
- (Movies, slides, other)
- Radio

Field Service Section (future)
- Club contacts and program planning assistance

Junior Education Section (future)
- 4-H & other school programs
- Teaching materials
- Cooperation with State Department of Education

Bode's proposed Table of Organization was comprised of three divisions, Administrative & Protection Division, Game, Fish & Forest Division, and Information Service Division. Bode devised the organization to take advantage of the skills of key people; the effectiveness of the structure would largely be due to their approach to organization and goals.



Townsend Godsey was first head of the Information Division. Among his creations were the Nature Knights conservation organization for youngsters, and the Missouri Conservationist *magazine.*

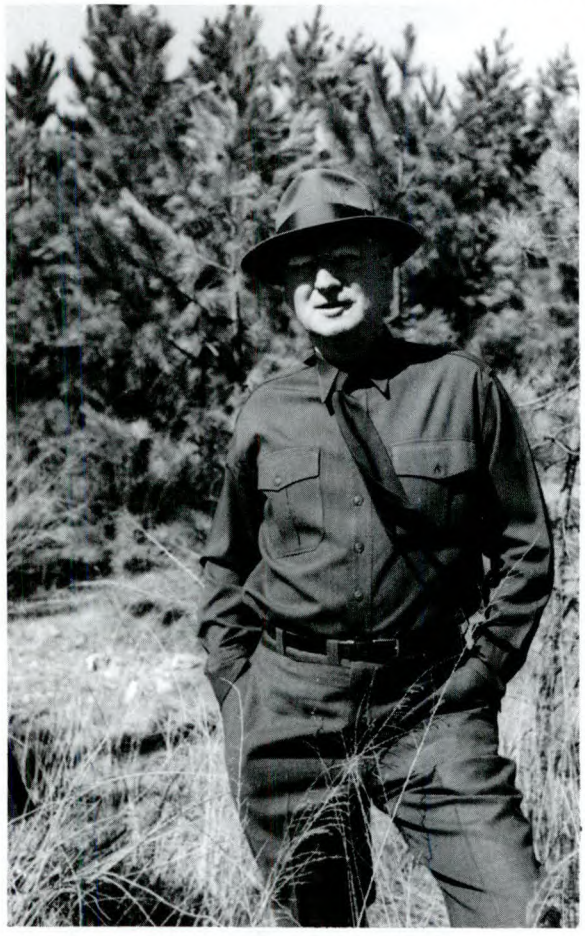
it, Bode next invited Arthur L. Clark, Fish and Game Commissioner of Connecticut, to confer with him relative to reorganization of a proposed Game, Fish and Forestry Division. At the same time he submitted a budget for 1938 of $294,800 as follows:

Office salaries	$29,500	10%
Protection	112,100	38%
Fisheries	44,250	15%
Refuge and Game	44,250	15%
Forestry	20,650	7%
Information	14,750	5%
Capital expenditures	20,650	7%
Contingent	8,650	3%

In March Bode, with the Commission's approval, hired Arthur Clark as chief of his Game, Fish and Forestry Division, and George O. White as his state forester.

Clark was an easterner, born in Boston in 1892. He was a graduate of Rhode Island State College, 1920, and obtained a master of science degree from Cornell in 1922. He had been executive secretary of the Massachusetts Fish and Game Association for five years, associate editor of the National Sportsman, a hunting and fishing magazine, for five years, and superintendent of the Connecticut State Board of Fisheries and Game for six years. He was married and had one child when he came to the Department, though he was later estranged from his wife. He had served in the air service during World War I.

George O. White also was from the east, born in Rhinecliff, New York in 1894. He also served in the air service during World War I as an aerial observer and photographer. He was a graduate in forestry from the University of Michigan. He was with the U. S. Forest Service for a time on the Plumas National Forest in California. He worked as a surveyor in Michigan from 1922 to 1933, when he joined the U. S. Forest Service as it was establishing national forests in Missouri. He held administrative posts, mostly con-



George O. White, first state forester, was a natty dresser who always wore a necktie—even in the field. His attention to appearance carried over to all Forestry personnel and facilities.

cerned with Civilian Conservation Corps camp direction, timber management and land acquisition, until he was hired as Missouri's second state forester. He also was married with one child.

Both these men were excellent choices. Clark was mercurial, given to experimentation and loved to party. White was stiff and formal in his manner, something of a plodder, but he was thorough in whatever he tackled, and he knew exactly where he wanted to go in Missouri forestry.

One more leader was needed, someone to head up the Protection staff and Bode found his man in Asbury Roberts.

J. Frank Ramsey who, as assistant director, had been heading the Protection force on a temporary basis, was asked by Governor Stark to take over running the state prison. Ramsey took the warden job in July, 1938, leaving vacant the Protection chief post which Roberts filled in August.

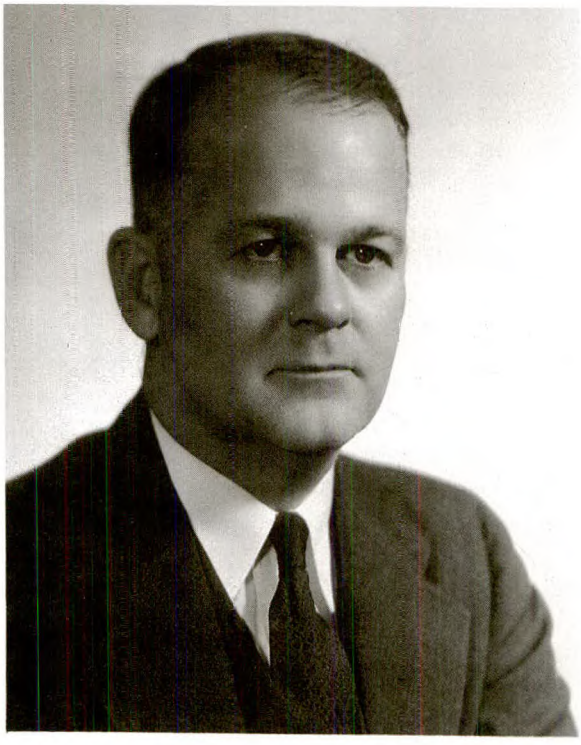
Asbury Roberts was born at Centralia in 1891. He had degrees both in agriculture and law. He served three years with the infantry during World War I and had been an editor of the *Missouri Ruralist* magazine from 1927 to 1932. He was with the Federal Land Bank and Farm Credit Administration from 1932 to the time he joined the Department in August, 1938.

The army made quite a impression on Roberts and old-timers remember him for organizing and running the Protection Division along military lines, even including calisthenics and some close order drill.

Both George White and Arthur Clark wasted no time in beginning their staffs. In July, 1938, White hired the first four foresters: William E. Towell, who was to rise to become



Arthur L. Clark, right, first chief of Game, Fish and Forestry Division, was an innovator always ready to experiment with a new conservation concept. He confers, above, with employees of the U.S. Bureau of Biological Survey, forerunner of the present U.S. Fish and Wildlife Service.



Asbury Roberts, the second chief of the Protection Section, reflected his military background in administering the Section.

director of the Department in 1957, Arthur B. Meyer, Edward J. Seay and August H. Schmidt. In November he added Charles Kirk as forester.

White immediately assigned one of his small staff to full-time public education, equipping a truck with a portable electric generator and sending him into the Ozarks with forestry films. Much of the Ozarks didn't get electricity until the 1950s, and these films were some of the first motion pictures some Ozarkers ever saw.

Bode, too, saw a need for public contact work and hired the first field service agent, Wallace Gray, who was assigned to Information Division but later transferred to the Game, Fish and Forestry Division. Field Service was an indication of Bode's extension philosophy.

Townsend Godsey, head of the Information Division, started the Department's publication, a quarterly tabloid named *Missouri Conservationist*, on July 1, 1938. He reported that 10,000 copies were distributed initially, but by November the list had grown to over 11,000. He suggested a twenty-five cent fee, which was approved. This never worked out in practice however, and was dropped in 1942. The *Conservationist* has remained free to Missouri residents ever since.

Arthur Clark, taking advantage of the new Pittman-Robertson Federal Aid to Wildlife funds, hired three more wildlife biologists and sent them into the field. They were Arthur H. Denney, A. Reed Twichell and Lisle Jeffrey.

The fisheries program, for the time being, was permitted to rock along as it had. Dr. George B. Herndon was retained as chief of fisheries. Herndon was a dentist, a graduate of St. Louis University. He had been active in county Democratic politics and had been appointed fisheries chief under Wilbur Buford for delivering the vote in 1932. But he was a quick learner and able administrator and was retained by Bode and Clark for his knowledge of fisheries management of the day.

The foresters were ordered to start programs to suppress wildfires, and the game biologists told to come up with some programs to benefit wildlife. Both groups were expected to work through existing organizations in their assigned regions. The Conservation Federation of Missouri still had county organizations which served as basic contact groups.

Because of Bode's background in extension work, he envisioned his field men as extension workers in wildlife and forestry. Their role was to serve as catalysts between farmers and sportsmen to benefit wildlife.

The Commission, with Bode and other advisors, came up with a group of fundamental tenets that were to guide the new Department. They could not be improved on even today.

1. All forests and wildlife are products of land and water.

2. The wildlife conservation program is one part of the large program looking toward the increased value and productivity of all the lands and waters of Missouri.

3. The hope of successful wildlife conservation depends upon the development and management of natural environment—food, cover and water. Artificial propagation is useful only as a supplementary agency.

The Missouri CONSERVATIONIST

Published Quarterly by the Missouri Conservation Commission

VOL. 1 NO. 1. JEFFERSON CITY, MISSOURI JULY, 1938

Conservation Commission Announces Its Program As Second Year Starts

Organization Nearly Complete; Program of Increased Production, Protection and Education Planned.

Approaching its second year of operation under Constitutional Amendment No. 4, which made the Missouri Conservation Commission a part of the basic structure of State Government, the Conservation Commission has completed plans for the increase of its game protection force selected under a merit system, an increase in game and fish production, establishment of an educational and field service program and state-wide forestry activities. Simultaneous with announcement of plans for the next twelve months period, starting July 1, the Conservation Commission also reported a summary of its first period of operation as shown in its report approved by the office of the State Auditor.

Constitutional Amendment No. 4 became effective on July 1, 1937, making a division of the year's activities between the former Missouri State Game and Fish Department and the Missouri Conservation Commission.

Continuing many of the fish hatchery and game production projects put under way during the first half of the year, the new Commission, composed of E. Sydney Stephens of Columbia, Chairman; A. P. Greensfelder of St. Louis, Vice-Chairman; Wilbur C. Buford of St. Louis, Secretary; and John F. Case, Wright City, member, set about to organize the new department. Because of the many factors involved in the reorganization of such a large department as the Missouri Conservation Commission has under its jurisdiction and the necessity for a long time program on a sound basis, the reorganization was not hurried but made a deliberate part of the Commission's program. With the Commission starting its second year the division posts have been filled and the Conservation Commission is now devoting much of its efforts toward selection of a field force. An important factor in this field force is the Conservation Agents and these are being selected on a merit basis after a series of written and oral examinations followed by personal evaluated interviews.

With it no longer necessary for twenty-five per cent of the license fees to be diverted to the purchase and maintenance of State Parks, additional funds are now available for expansion of the Conservation program. This additional revenue, with a slight increase in funds due to increased license sales, places the Conservation Commission in a better position to carry out a State-wide program than at any time in many years although the total available is still lower than for most states comparable to Missouri. Unlike many

(*Continued on page 2*)

In response to an apparent desire for information concerning the activities of the Conservation Commission, and in order to provide information for the guidance of individuals and groups interested in the conservation of wildlife, this publication is being issued. Its purpose is to keep the public informed as to the policies and plans of the department as the work of organization and administration progresses.

Suggestions as to the subject matter of future issues are solicited. It is our purpose to use this publication as one of the several phases of service by the Commission to the people of the state.

The publication is in the nature of an experiment. Its continuance will be determined by the extent of the interest that is manifested in its contents by those to whom it is sent.

E. Sydney Stephens,
Chairman
Missouri Conservation Commission.

Conservation Agents Under Merit System

Probationary Appointments Are Expected by July 1st as Examinations Close

A force of probationary Conservation Agents, selected under the merit system will be placed in the field within the next thirty days as examinations, started last April, are completed, the Conservation Commission has announced. The field force, when brought to its full strength as provided for in the 1938-39 budget already approved by the Commission, will include 36 field agents and four District Supervisors.

The field force of temporary Conservation Agents was included in the list of applicants who took the series of examinations for the new organization, and any who are retained must have reached the eligibility list the same as any new candidate.

Examinations started in Jefferson City last April at which time representatives from every county in the state excepting Grundy, Knox, Worth, and Scotland, sought an opportunity to become a member of the new force of Conservation Agents.

Originally there were 757 applicants, but it was necessary to reject 133 names of those not meeting the preliminary qualifications set by the Commission, leaving an invitation list of 624 names; of that number, 480 appeared for the examinations.

These written examinations for the determination of the general aptitude of the applicants required nearly three hours. The tests included written work on Spelling and Vocabulary, History and Civil Government, Geography, Arithmetic, Forestry, Nature Study, Fish and Game Law and Game Law Investigation.

The examination questions were prepared by the Commission after a study of tests used in other states and were known only to three Missourians. The tests were taken by groups of thirty applicants in class rooms of the Jefferson City Junior College. While the public was not admitted, in order not to confuse the applicants, committees from various sportsmen's organizations over the state,

(*Continued on page 4*)

The first issue of the Missouri Conservationist *appeared in July, 1938 "as one of the several phases of service by the Commission to the people of the state." Its uncertain future was to be determined "by the interest manifested" by readers.*

4. The major production of wildlife must be accomplished on privately owned land. Therefore, it is to the land *user's* advantage to cooperate with the landowner because more than ninety percent of Missouri land is in private hands.

5. The hope of wildlife restoration and conservation in Missouri lies in the three-way cooperation of the state, the landowner and the public, based upon adequate information and mutual understanding.

6. Successful fact-finding and administration depend upon the utilization of qualified and carefully selected personnel.



Allen Reed Twichell, the third wildlife biologist hired by the young Department, moves a trapped beaver whose dam had flooded a road for release elsewhere in the state.

Those "qualified and carefully selected personnel," the wildlife biologists (or project leaders, as they were called), were sent into the field to find game management techniques that could be incorporated into regular farming practices. By working through sportsmen's and farmers' groups, they were to apply these techniques on the land to discover which were most effective. It was a trial-and-error proposition, because wildlife management principles at that time were still mostly theoretical. The basics of food, cover and water were known for most species, but the question was how to get those needs met

by those who controlled the land.

Unlike Gaul, which was divided into three parts, Missouri was divided up into four parts, with a single biologist assigned to each. Imagine the gall of those four young men charged with improving the wildlife of one quarter of the state.

In the Ozarks, four forest fire control districts of about half-a-million acres each had a forester assigned. Their task was a lot tougher than the fire suppression task of the national forest workers, who were merely putting out fires on federal lands: *their* job was to get private landowners to sign up in agreement to stop the century-old practice of burning the woods.

As far back as anyone could remember, burning the woods each spring had been a tradition. It was supposed to suppress sprouts, discourage snakes, ticks and chiggers, and make the grass greener for cattle. Even the Indians had burned the Ozarks, according to Antoine Le Page du Pratz, the French physician who visited the Ozarks in the early 1700s. Now, here come these upstart college boys, telling us that we shouldn't do it, that it's bad for the woods. Why, even Fred Dunlap, the first state forester back in the early 1930s, wrote that controlling forest fires in the Missouri Ozarks was "impossible."

Nevertheless, those first four foresters tackled the "impossible." They fought fires



Low-water crossings were frequently encountered on Ozark byways in 1946 when the Department's "Showboat" traveled back roads, bringing the conservation message to rural residents.

and when they weren't fighting fires they were paying personal visits to landowners and exhorting them to sign up to cooperate in fire suppression. They visited rural schools with that truck they called the "Showboat" and showed movies and gave talks. It was a start.

Meanwhile, the oral interviews for prospective game wardens were held in May, with the commissioners themselves helping to conduct them. At St. Joseph, John F. Case, assisted by Col. R. A. Johnston of Boonville examined young men. Wilbur Buford and H. H. Lark of Steelville examined men at Cape Girardeau. I. T. Bode, J. O. Sheppard of Savannah and Dr. H. J. Hearrington of Lexington examined men at Warrensburg.

E. Sydney Stephens, assisted by Moreland Brown of Lake Ozark and William F. Fahey of St. Louis, tested men in Springfield. At St. Louis, J. Frank Ramsey, with William K. Gardner of St. Louis and J. W. Head of Palmyra conducted the examinations. A. P. Greensfelder, with George O. White of Jefferson City and Beverly Bonfoey of Kirksville conducted examinations at Macon.

In April, some 480 applicants were given oral and written examinations in Jefferson City and then were ranked according to their test scores.

On June 27, 1938, thirty-five men were appointed *conservation agents.* The old game warden was gone. Four of the new conservation agents were appointed regional supervisors: Joe Green, W. G. Noble, Vernon Bennett and Cave Johnson, all holdovers from the old Fish and Game Department who scored well on the examinations. In all, twelve men of the old warden force made it through the examinations and became conservation agents.[1]

The name "conservation agent" was changed within a short time to "*wildlife* conservation agent," to distinguish them from field men of the Soil Conservation Service who also were called conservation agents. The title "agent" was Bode's way to express the broadened concept of the game warden's job. No longer solely concerned with law enforcement, the new agent was expected to be a force for conservation in his assigned territory in any way possible. It was expected that he would serve as a wildlife-fishery-forestry manager on the ground, and perform conservation education and information work as well. Conservation agents were paid $120 per month, supervisors $150.

While all this organizing and initiating programs was going on, Bode was under fire—almost from the day he reported for duty.

Before he could draw his first month's pay, a Jefferson City attorney and politician, James T. Blair,[2] filed for an injunction restraining the Commission, state auditor and state treasurer from paying Bode's salary on the grounds that he could not be legally employed. Blair cited the following provision of the State Constitution:

"Article 8, Section 10. **Aliens not to hold office. Residence required.** No person shall be elected or appointed to any office in this State, civil or military, who is not a citizen of the United States and who shall not have resided in this State one year next preceding his election or appointment."

On November 29, 1937, just fourteen days after Bode began work, Judge Nike Sevier ordered members of the Commission, Bode, Auditor Forrest Smith and Treasurer Robert W. Winn to show cause why the injunction should not be granted, and directed that no state funds be paid to Bode.

At the same time Attorney General Roy McKittrick filed *quo warranto*[3] proceedings in the State Supreme Court asking for Bode's ouster on the same grounds.

Edward K. Love and others from St. Louis undertook to pay Bode's salary while the question was decided by the courts. J. Frank Ramsey continued to function as acting director while Bode was in official limbo.

Charles Callison believed that Blair and McKittrick were moved by their political beliefs to file the suits. There had been some

[1] Two others were retained, one as fur and fish market inspector and one as a river patrolman. Both later became conservation agents.

[2] James T. Blair was elected governor in 1956. He was the father of a later Conservation Commissioner, Jim Tom Blair.

ST. LOUIS POST-DISPATCH
FRIDAY, FEBRUARY 25, 1938

BODE OUSTER SUIT FAILS; STATE GAME CHIEF KEEPS POST

Supreme Court Rejects Plea He Is Ineligible Because He Was Not Resident of Missouri.

JUDGES UNANIMOUS IN THEIR CONCLUSION

But They Divide, Four to Three, on the Reasoning by Which They Arrive at Decision.

By the Jefferson City Correspondent of the Post-Dispatch.

JEFFERSON CITY, Feb. 25. — The Missouri Supreme Court today upheld the appointment of Irwin T. Bode as State Director of Conservation, denying an application to oust him which was filed by Attorney General Roy McKittrick on the theory that he was ineligible because he had not resided in the State for one year preceding his appointment.

The first legal challenge to the new Commission came just fourteen days after Bode assumed his duties. James T. Blair, who became governor in 1956, charged that Bode could not hold state office because he failed to meet the requirement for state residency.

Missouri applicants for Bode's $6,000 per year job, and some had brought political endorsements with them. These had been ignored by the Commission in selecting a director, as Callison said, "leaving little doubt that it intended to hew to the line of non-partisanship." The conservation authorities who designated the pool of candidates for director had considered no Missouri applicants qualified.

The lawyers debated the case around two main questions: was the directorship of the Conservation Commission a "public office" and therefore subject to constitutional requirements of residence? Did the amendment's grant of authority to the Commission to "determine the qualifications of the director" supersede the earlier provisions of the constitution with respect to residence?

Bode's lawyers argued that he wasn't really a public officer in that he was an employee of the Conservation Commission, and that members of the Commission were the public officers as envisioned by the constitution.

Even if Bode were held to be a public officer, they argued, he still could hold office under Amendment 4, because that amendment was a later expression of the will of the people which gave the Conservation Commission the power to fix his qualifications.

The Supreme Court rendered its verdict on February 25, 1938, and was unanimous in finding for Bode. Four members of the court held that Bode was indeed a public officer, but that the amendment was the latest expression of the will of the people and must prevail. Three of the justices believed that Bode was *not* a public officer, and for that reason the ouster should not be sustained. In any event, for different reasons, the entire court held that Bode could keep his job and that he should be paid.

This was the first of two cases involving the Commission that would reach the Supreme Court. The second had to do with the powers of the Commission to make regulations. At this time no one knew for certain just how much power the Conservation Commission had. There was a considerable difference of opinion among lawyers statewide

[3] In law, a writ of proceedings questioning the right by which one holds office.

regarding the Commission's authority to set aside or change the old fish and game laws still on the books. Some prosecuting attorneys would not file cases brought under the Commission's rules, but would do so without hesitancy if filed under the statutes. A test case was necessary to determine the extent of Commission authority. It came about over a bass fishing regulation.

The statutes provided for the fishing season on black bass to open May 30. The Commission established the bass season to open May 28, 1938, a Saturday. This would give anglers two extra days over a long Memorial Day weekend.

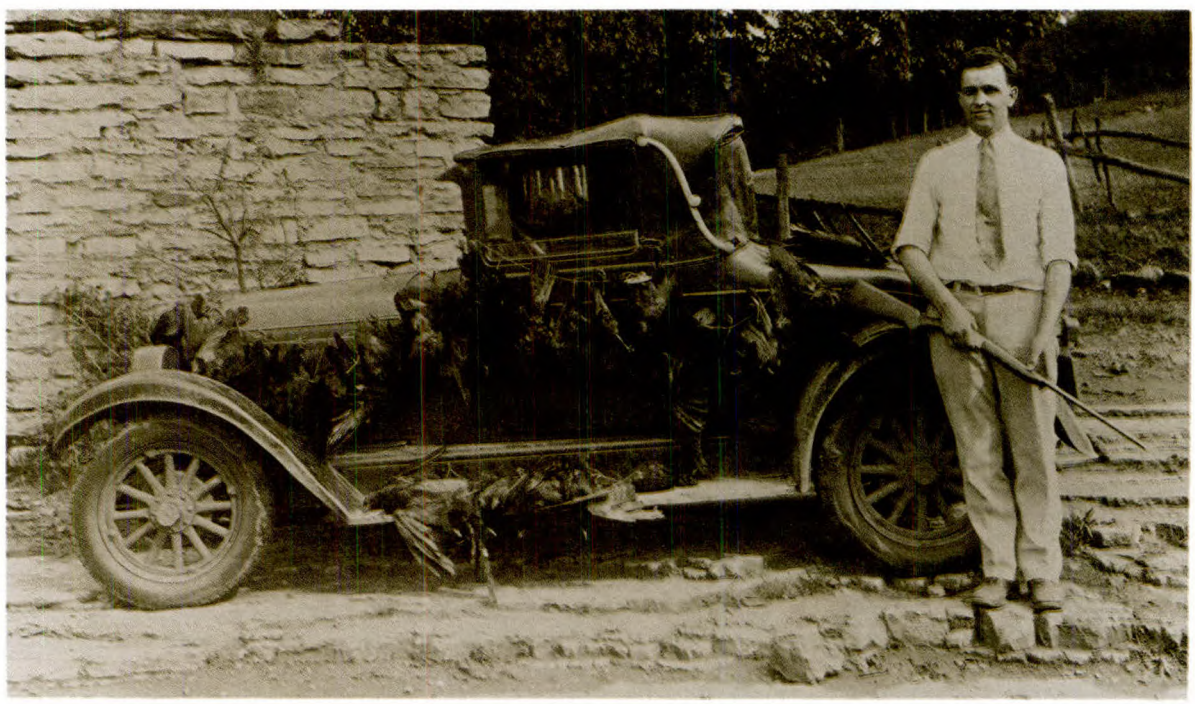
By prior arrangement, on May 28 a Dallas County sportsman named Byron Marsh went fishing in Greasy Creek and caught a largemouth bass. The sheriff, Harrison Bartlett, arrested him. Marsh was accused of violating Section 8270, Revised Statutes of Missouri, 1929, which declared a closed season on bass until May 30.

He was tried June 9 before Justice of the Peace R. A. Andrews, found guilty and fined $10. Marsh refused to pay the fine and was committed to jail. The following day Marsh petitioned the Supreme Court of Missouri for a writ of *habeas corpus.*

Lon S. Haymes, a Springfield attorney who had helped draft the conservation amendment, represented Marsh, assisted by William R. Collinson also of Springfield and Charles M. Polk of St. Louis. Sheriff Bartlett was represented by Attorney General Roy McKittrick and others.

The Conservation Federation of Missouri entered the case as *amicus curiae* ("friend of the court") with a brief and arguments from a group of lawyers headed by J. T. Montgomery of Sedalia.[4]

The Court announced its decision in early November, 1938, by unanimously upholding the Conservation Commission's powers to regulate the wildlife and forest resources of the state. The amendment's declaration, "All laws inconsistent herewith shall no longer remain in force and effect," was valid.



Leonard Rowe, Field Service agent, used a tried-and-true method of crow control in the early days of the Department. Crows, once considered a serious predation threat, were the targets of eradication methods from shotguns to dynamite.



Food, cover, water—the three essentials of adequate habitat were already being touted in the 1930s, when Leonard Rowe built this exhibit encouraging wildlife and forest protection.

Further, the penalty sections of the statutes, which do not conflict with rules of the Commission, were declared to remain valid. Thus the Conservation Commission not only had the power to set regulations for wildlife, but the penalties of the statutes could be applied to those regulations.

It was a complete vindication of the constitutional amendment and the will of the people.

Fighting to keep its director, winning recognition of its powers to make regulations, and getting some wildlife and forestry programs into the field made July 1, 1937 to the end of December, 1938 a busy year and a half.

[4] Others were: William F. Fahey of St. Louis, R. A. Brown Jr. of St. Joseph, Nick T. Cave of Columbia, Curtis J. Quimby of Jefferson City, Ludwick Graves of Kansas City, Russell Dearmont of St. Louis and L. D. Joslyn of Charleston.



Early experiments crossing wild turkeys with domestic turkeys to re-establish populations were generally unsuccessful. Semi-wild turkeys, right, were purchased from B. K. Leach and released in the wild, where they failed to adapt to the environment.



Arley F. Blackwell, long-time state wildlife refuge manager, spent many hours trapping deer as part of the Department's early restoration program.

The Pre-War Years

Bode's aim was to have most of his personnel out in the field "on the firing line," as he expressed it. He preferred to have a minimal staff in the Central Office and the bulk of the Department's personnel actually working with citizens on the land. It was the old extension philosophy.

A primary assignment of the biologists, or project leaders, was to bring together the various sportsmen's groups and landowners into cooperative wildlife projects. These were only partially effective. Landowners were interested mostly in controlling trespass problems, and sportsmen were mainly interested in *harvesting* wildlife, not in working to increase it. There were exceptions, of course, but the cooperative wildlife projects were mainly failures. Both landowners and sportsmen tended to put too much faith in creation of refuges, which biologists believed were of value only in special circumstances. Farmers wanted refuges for quail and rabbits, but more to control trespass problems than to restore wildlife.

Sportsmen put faith in refuges, believing that without hunting, quail and rabbit numbers would dramatically increase and spill out onto surrounding lands. Biologists knew that whether they were hunted or not, wildlife like quail and rabbits have a high population turnover each year, and that there would be no big build-up beyond the carrying capacity of the land. That was a term that farmers and sportsmen heard increasingly—carrying capacity—the amount of wildlife a given area of land could support. Biologists tried to urge farmers and sportsmen to work together to increase the carrying capacity of the land, but insisted that a part of each year's quail and rabbit crop should be hunted, as it would die anyway.

Much of the public still thought in terms of stocking fish and wildlife, but the Department was determined to develop programs utilizing natural reproduction and to play down stocking as a management measure. Stocking was effective for species like deer and wild turkey, but mostly ineffective for short-lived species like quail and rabbits. It was difficult to explain the difference to ordinary citizens, who had become accustomed to stocking programs.

In the case of fish, one successful spawning season in a stream could provide more fish than could be stocked by artificial means. Yet the public had seen hatchery trucks dumping fish into streams for years. This led to a lot of controversy and the biologists were on their mettle to prove themselves. The politicians stood in the wings, eager to grab on to any controversy between the Department and its public, so emphasis was placed on trying to educate the public to these new concepts and on programs that would show some immediate gains.

Biologist Harold V. Terrill is credited with



Biologist Harold V. Terrill, pictured here in 1941, is credited with initiating the farm pond program that soon studded the landscape with 150,000 ponds.

recognizing the value that farm ponds could have for wildlife and, even though ponds were only one aspect of the cooperative wildlife management programs, it soon became the dominant one. Once the federal government support programs began underwriting farm ponds, the idea took off—in a relatively short time Missouri had 150,000 farm ponds dotting the landscape.

But, it wasn't long before it became obvious that prairie chickens, deer and wild turkey needed special study. Bode at first thought the University of Missouri's Cooperative Wildlife Research Unit would handle all the basic wildlife research, but he became convinced that problems needing immediate attention should be addressed by Department biologists. It was also found that individual biologists had their own interests and abilities that could be utilized to the benefit of the Department. Thus, Charles W. Schwartz was given the task of learning as much about prairie chickens as he could, and to make recommendations on their management. This work resulted in the Department's first book-publishing venture in 1944, when it published Schwartz's *The Prairie Chicken in Missouri.*

Biologist David Spencer took on deer restoration as a project, and Starker Leopold was hired and assigned to wild turkey studies. The Department had been stocking semi-wild turkeys in some areas and Leopold's work revealed that this was a waste of time and money.

Biologist Hugh Denney had a flair for synthesizing information and for long-range planning. He was eventually taken off his field assignment and given the task of developing a wildlife survey based on soils, which he believed were basic to any restoration of wildlife. While he was at it he produced the state's—and nation's—first forest cover map.

Denney also started the comprehensive Meramec Watershed Study to serve as a basis for the Department's decisions on the dam on that river which had been proposed in



The first farm pond was built on the M. W. Voss farm near Linn in 1941. Voss family members watch as Department personnel inspect the pond. From left to right, they are Charles Schwartz, Starker Leopold (kneeling), Carl Noren, Reed Twichell, David Spencer, Paul Barnickol, Dr. Paul Dalke, R. G. Ranney, Bill Crawford, Bruce Lewis, Paul Tulenko, A. Hugh Denney, Willard Barbee, Wallace Gray, Jay Morrow, Kenneth Rowe, Stirling Kyd and Harold Terrill.



Research on prairie chickens by Charles Schwartz extended from Wisconsin to Missouri and led to the publication in 1944 of The Prairie Chicken in Missouri.



The same Voss farm pond, more than forty years later, is still owned by the Voss family. It continues to provide a peaceful panorama, and home and habitat for a host of wildlife.



These 1941 photos show the home base for wildlife researchers staying at the Caney Mountain Wildlife Refuge. Restoration work on deer and wild turkey were under way at this time.





Biologist Starker Leopold, who specialized in wild turkey research, found a few moments to relax during a project at Caney Mountain Wildlife Refuge in the early 1940s.

1936. Denney left the Department before that study was completed and Biologist Bill T. Crawford took it to its conclusion. Lisle Jeffrey was especially good at dealing with the public and handling correspondence, so he was brought into the Central Office to assist Arthur Clark and became the state leader of the federal aid crew.

Research wasn't limited to game animals, however. The first fisheries biologist was hired and assigned to study Lake of the Ozarks. Fishing there had fallen into the doldrums following the first few years' bonanza, and Albert E. Weyer was hired at $100 a month and told to find out what could be done to improve fishing. Weyer may not have originated the phrase "biological desert," but he is supposed to have applied it first—and incorrectly—to Lake of the Ozarks.

A few months later Dr. W. C. Frohne was hired as an aquatic biologist and he set up the state's first comprehensive stream survey.

The Commission, in June, 1939, also adopted a policy statement on the construction of dams on Missouri streams, a statement that remained essentially unchanged for many years:

"The Conservation Commission is charged by the Constitution of the state of Missouri with the duty of restoring and conserving the bird, fish, game, forestry and all wildlife resources of the state. The Commission, therefore, will endeavor to advise the people as to the significance and effect upon these resources of the construction of dams in the streams of the state, or as to the significance and effect of other water-control projects, such as flood control, sanitation, or drainage, and it will not concur in the construction, maintenance and operation of such projects unless provisions are made in connection therewith such as it feels are adequate and justified to protect and conserve the wildlife resources which would be affected."

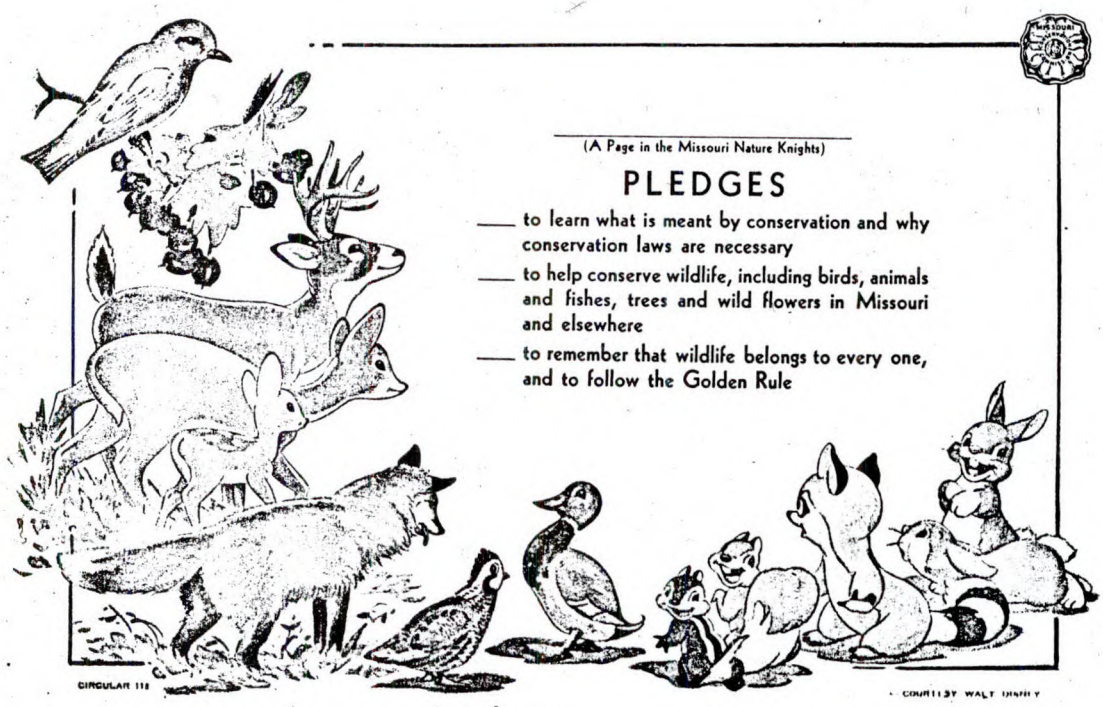
In December, 1939, the Commission created the position of farm forester, in cooperation with the Soil Conservation Service and Extension Service. Forester Arthur B. Meyer was taken off the Sam Baker forest fire protection district near Piedmont to become the state's first farm forester at Warrenton, with salary paid by the SCS and expenses paid by the Department.

Information Chief Townsend Godsey's education program for youngsters, the Nature Knights, got an assist from former Missourian Walt Disney, who volunteered to illustrate the printed materials used in the program, and the Commission was duly appreciative.

In March, 1940, it hired Faith Watkins, the first professional female employee of the Department, and placed her in charge of youth and women's programs. She was classified as a field service agent, but assigned to the Information Division; the other four field service agents were assigned to the Fish, Game and Forestry Division. Watkins, a graduate of the University of Michigan's School of Forestry and Conservation, had ten years experience in scout work and had been doing public relations work for the St. Louis City



This 1938 photo was captioned by photographer Dr. Paul Dalke "How NOT to Plant Fish." The photo was taken at Blackwell Lake in Indian Trail State Forest.



Walt Disney designed this pledge for Nature Knights "Pages." A native of Marceline, Disney was already beginning to make his mark in the annals of entertainment when his familiar style graced this 1940s certificate.

and County Council.

A generation of boys and girls grew up through the Nature Knights program, starting as Pages and working up through Squires, Knights and eventually to Conservationists, by doing various wildlife-enhancing projects on the land.

Godsey also secured permission to produce the Department's first motion picture, *Back to Missouri.* The theme was the effort of the Department to bring landowners and sportsmen together to benefit wildlife.

Godsey resigned his post in June, 1941, and Bode took the opportunity to reorganize the Department's education and information set-up. He created an Education Section and located it within the Administrative Division.

Dr. Forrest Olin Capps, 39, was hired as chief of the newly created Education Section. At the same time the Commission hired his assistant, Everett F. Evans.

Capps was originally from Worthington, Missouri, and had his bachelor of science degree from what is now Northeast Missouri State University. He received his master's and doctorate degrees from the University of Missouri-Columbia. He had been a teacher, principal and superintendent of schools before joining the Department. Evans, from Mt. Moriah, Missouri, was 29. He had his bachelor's degree from Maryville and his master's of education from Missouri University. It was while he was working on his master's degree that he developed the first conservation teachers' manuals issued by the Department.

The Commission noted that, "in creating an Education Section, the Commission recognizes the important part that education, particularly among schools and colleges, must have in the conservation program . . . ."

Replacing Godsey as head of the Information Division was 28-year-old Harold W. Clover. He had a degree in journalism from Washington University and experience as an advertising manager and editor. Assisting him

was 28-year-old Charles H. Callison who, although born in Canada, had been educated at Northeast Missouri State and University of Missouri-Columbia. He had been a newspaper editor in Kansas and Boonville.[1]

A major worry of the Commission during this period was the first of several attempts to repeal its constitutional amendment. In the 1939 legislative session, Representative Fred Spearman, a Miller County farmer, had introduced a bill calling for a vote to repeal Amendment 4. A more insidious attack came from State Senator William Quinn of Lewis County, who introduced a bill to repeal game and fish statutes formerly enacted by the legislature. This would also repeal the penalty sections, leaving the Commission with no way to enforce its regulations. Both of these bills were resoundingly defeated in the legislature when the Conservation Federation brought its power to bear on the solons.

Charles Callison, in his *Man and Wildlife in Missouri* quotes Wilbur Buford, a knowledgeable politician in his own right: "I have been in politics all my life, but the pressure that was brought to bear on the legislature against the resolution was the most tremendous I have ever seen." The recently reactivated Federation was protecting its creation.

The support for such bills came from a variety of sources, according to Callison. Politicians simply didn't like the idea of a nonpolitical commission, and some resented the people by-passing the legislature via the initiative process.

Bode and his staff of zealous biologists were not universally accepted. Many sportsmen were reluctant to abandon traditional game and fish stocking as ways to perpetuate or increase wildlife. They thought Bode was a "foreigner" and his staff a bunch of impractical dreamers. They complained the Commission was too arbitrary and changed its rules too often.

Fortunately, a great many more citizens were willing to give the professionals a chance. When ex-State Senator A. L. McCawley paid a staff to collect 46,000 signatures for an initiative petition to repeal the regulations of the Commission and re-enact the old game and fish laws, Missourians voted it down on November 5, 1940, by better than two to one. But it gave the Commission and the Federation a scare.



F. Olin Capps became the first chief of Education Section in 1941, when Bode reorganized the information and education efforts following the resignation of Townsend Godsey.

While all this was going on, John Case's two-year term as a commissioner expired in July, 1939, and Springfield businessman Glen E. Stoner became the next appointee to the Commission.

When the State Supreme Court ruled that the Conservation Commission did indeed have the power to establish all regulations for wildlife and forestry, the staff and Commission set to work to create the best regulations they could.

Bode and Chairman Stephens went on the road, conducting meetings all over the state, to which were invited anyone who wanted to sound off on regulations or programs. Bode and Stephens told the assembly the biologists' conclusions and recommenda-

[1] This is the same Callison who in 1953 published the first history of the Conservation Federation of Missouri and the Department, *Man and Wildlife in Missouri.*

TURN ON *MORE* HEAT

Our Old Friend

SPEARMAN

Is Still At It

JOINT AND CONCURRENT RESOLUTION No. 16

Introduced by Representative Spearman. This resolution would submit a constitutional amendment to the qualified voters of Missouri at the general election in 1942 repealing the Conservation Amendment.

This is a deliberate attempt to again place the administration of natural and wildlife resources in the hands of politicians, in spite of the fact that Missouri citizens have overwhelmingly expressed themselves on several occasions regarding this matter.

This attack comes at a time when six other states are adopting Missouri's Conservation Amendment as a model. Can it be that the best is not good enough for the politicians, or is it too good?

Stop the threatened passage of this Resolution!

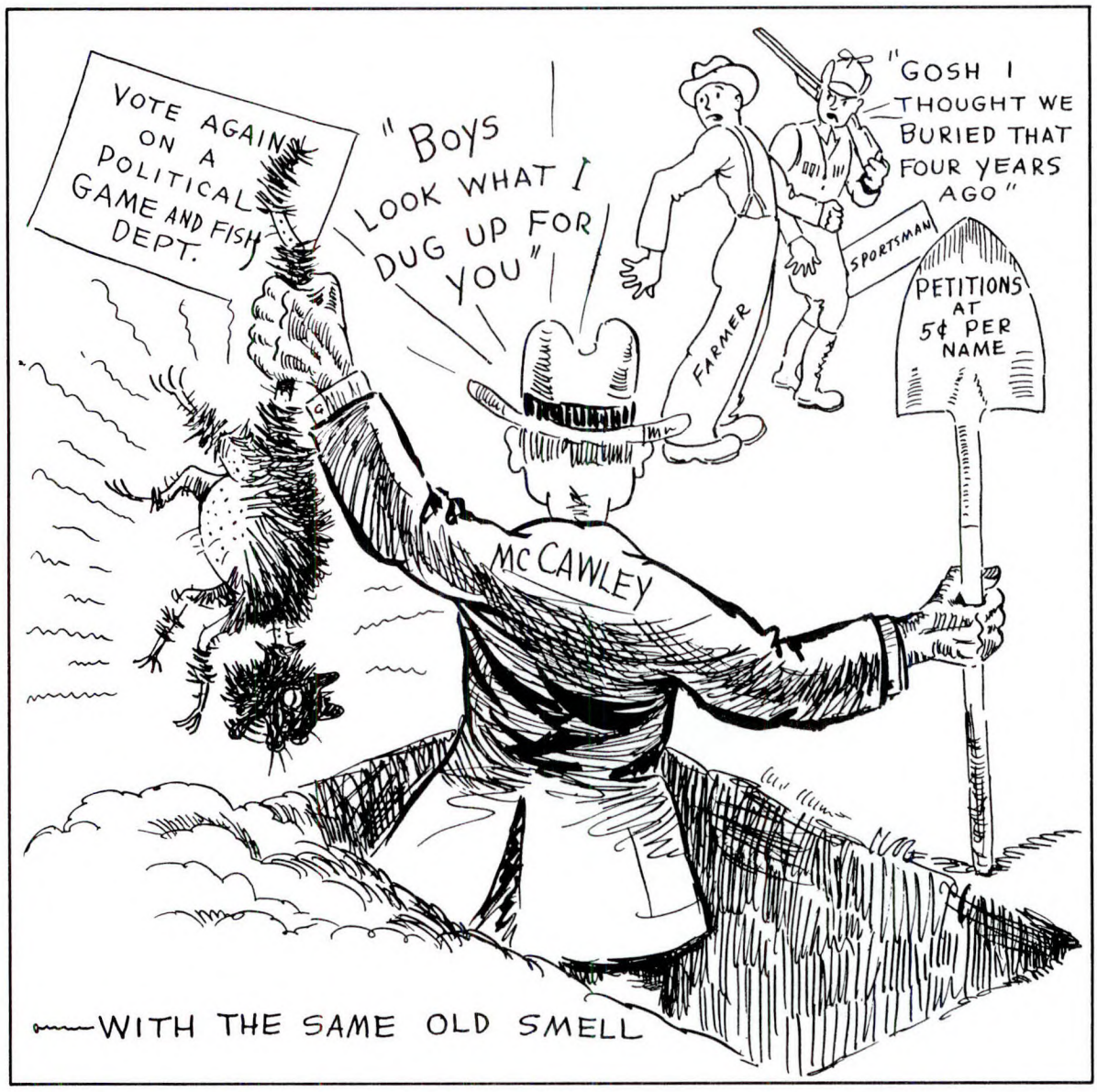
Make your letters a spring blizzard on Jefferson City. Each of you, individually, write your state senators and representatives. Tell them what you think of this Resolution.

Why waste another $75,000 of the taxpayers' money because Spearman wants to?

Why subject the Commission to another period of trial and uncertainty?

Give the Commission its fair chance

Fred Spearman, a Miller County farmer and state legislator, was one of several instigators of efforts to repeal the constitutional amendment which created the Commission. The Conservation Federation galvanized sentiment against the efforts, preserving the constitutional mandate.



A cartoon by St. Louis artist Wilton Willman on the cover of Missouri Wildlife *magazine ridiculed yet another attempt to repeal Amendment 4. Missourians voted down the attempt by more than two to one.*

tions for regulations. There was a good deal of discussion, pro and con, which was useful to the pair. Out of all these meetings a set of regulations was formed that was published in January, 1940, as the *Wildlife and Forestry Code.* These regulations were the first that attempted to supersede all of the statutory provisions, except the penalty statutes. One notable inclusion was the requirement—for the first time—that women anglers have permits.

It is interesting to note the Commission' commitment to involve the public in regulations. Stephens and Bode agreed that unless regulations were understood and had public support, they were not likely to be observed. This early policy of getting public support for regulations continued. For a number of years Assistant Director Jay Morrow conducted annual meetings in various parts of the state to

solicit recommendations and to tell the public what biologists were recommending. These were finally abandoned during the 1950s, when attendance began to decline and the public perceived that the Department would handle things in the best interests of wildlife and the public.

A regulations committee was appointed to consider recommendations for regulations from employees and the public. Special interest groups were invited to regulations committee meetings to present their recommendations in order to promote public involvement in the process. All regulations correspondence from the public was handled by this committee and abridged copies sent to the commissioners. Essentially the same process is used today.

In January, 1941, the Commission took the Protection Section out of the Fish, Game and Forestry Division and made it a separate division. Later that year it decided that conservation agents could no longer collect a part of the fines assessed against convicted fish and game rule violators. Up to this time, agents were given a portion of the fines assessed, with an occasional payment for mileage in connection with a case. This was a modest little "extra" enjoyed by the agents, "coffee money" they called it. A report on a six-month period showed $1,503.30 in fees and $363.85 in mileage payments. Of forty agents and supervisors, only two reported no fees or mileage collected. Agent Frank I. Jones collected the most, with payments of $162 in fees and $175.70 in mileage on fifty-four cases prosecuted—a tidy sum in those days when an agent's salary was only $120 a month.

At first the Commission adopted the position that any such payments were subject to criticism and, if assessed at all, ought not go to the agents but to the Department. Later, it sent a recommendation to the courts that they reduce costs to the defendant in an amount equivalent to the fees earned by the



Public meetings like this one held at Irondale School in the early days of the Commission are a long-standing tradition within the Department. The meetings open the doors of communication for citizens to voice their concerns and Department personnel to explain the latest conservation efforts.

agents. It also suggested that prosecuting attorneys should encourage heavier fines in such cases. The Commission had increased agents' salaries by $180 per year—from $1,440 to $1,620—and felt any additional fees were inappropriate.

The Commission also adopted a classification system for all employees, with commensurate salary scale.

In September, 1941, the Commission adopted a policy designating "conservation agents as the official representatives of the Commission in connection with all of its activities in their respective districts."

This action reflected Bode's belief that an agent should be much more than a game warden, and imposed a special trust in the agents as a group within the Department.

Not all agents hailed the new responsibilities. Those oriented strictly to law enforcement resented having to take on the additional duties, but this was overcome.

A sidelight of the policy statement was that some agents interpreted it to mean that they were the representatives of the four-member Conservation Commission and not responsible to the administrative staff. This resulted from a curious semantic situation. Throughout its early history there was no distinction between the Department (the agency) and the Conservation Commission. Employees and the general public as well, referred to both as "The Commission." If one took a narrow interpretation, as a few agents did, one might conclude that the statement referred only to the four-member Commission, not to the staff. This obviously was not the case. Agents were representatives of the Commission in the sense that they represented its programs as part of the entire staff.[2]

At the same meeting that established conservation agents as representatives of the Commission in all phases of its program, the Commission also decided to create a Master Conservationist Award, the highest honor it could confer upon citizens of the state who had accomplished exemplary conservation work. A committee was created to consider nominations for such an award, though this program didn't get under way until 1942.

As early as 1940 the Commission was beginning to worry about the effects of the military draft which began that year. It adopted a policy of promising a job—though not necessarily the same job—to anyone called into service.

A year later, in a show of patriotism, the Commission decreed that servicemen stationed in Missouri would be given resident hunting and fishing privileges; the policy continues to this day.

On the other hand, the probability of war was in the air. The Commission was concerned about a possible paper shortage and ordered Bode to get the next years' permits printed as quickly as possible to offset the anticipated shortage. The Commission also ordered him to stockpile some automobile tires—probably not the most patriotic decision, and it was later disallowed.

Their worries about war turned out to be valid. The regular monthly meeting of the Conservation Commission was scheduled for December 8, 1941. The minutes of that meeting read:

"The Director brought up for consideration the proposed budget for 1942 . . . . and in view of the national emergency and the possible effect on the income of the Department during the coming year, asked the Commission to consider carefully the fact that the proposed budget might result in using up much of the reserve fund unless the revenues remained the same as in the previous year.

"Consideration of the budget was temporarily suspended to listen to the following

[2] Missouri state government, at various times, had a legal "Department of Conservation" which included the Conservation Commission and its employees, but also included other agencies assigned to it by the governor. For many years the State Park Board was considered to be a part of the state's "Department of Conservation," along with the Conservation Commission and the Moses Austin Memorial Committee. When the Lewis and Clark Trail Committee and the Mississippi Parkway Commission were assigned to the State Park Board they, too, were part of the "Department of Conservation." In 1974, with reorganization of state government and creation of a Department of Natural Resources, the Department of Conservation officially came to mean the staff and employees of the Conservation Commission. The four-member Commission was the legal head of the Department and, under law, a part of it.

speech of the President of the United States, which was broadcast over a national [radio] hookup at 11:30 a.m.:

"'Yesterday, December 7, 1941—a date that will live in infamy—the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan . . . .'"

Bettye Hornbuckle, secretary to the Commission, took down every word of the speech and included it in the minutes. Reading over the old document, one can almost hear the cultured, richly resonant tones of Franklin D. Roosevelt as he asked Congress to recognize that a state of war existed between the United States and Japan.

That war was to have its effect on the conservation programs of Missouri in many ways.

The War Years

In November of 1941, Irwin T. Bode had officially completed four years as director. He brought this fact up at the January, 1942, Commission meeting and was given a vote of confidence and reappointed for another four-year term, with his salary increased to $7,000 per year.

The twin duties as director for the Conservation Commission and member of the State Park Board were apparently beginning to wear on Bode, and he talked to the Commission about this. The Commission asked Judge Fred L. Williams of St. Louis to render an opinion on whether the Commission could prohibit Bode from serving on the State Park Board (composed of Bode, the Governor and the Attorney General), if it found those duties could interfere with his services to it. It also asked if Bode could legally serve as both member of the Park Board and director of activities in the capacity of executive officer of the Park Board.

In March, Judge Williams rendered an opinion that Bode could legally serve on the Park Board and as executive officer for it, but that the Commission could prevent him from serving on the Park Board if it wanted to do so. Apparently the Commission did not think it politic to forbid Bode to serve, for the matter was dropped. Bode continued to serve on the Park Board until it was reorganized in 1953, although the Chief of Parks gradually took over the functions of executive officer, relieving Bode of the burdens of that office.

In May, 1942, the Park Board moved out of the Monroe Building quarters it shared with the Department, further severing the ties that bound the two agencies.

The Commission appointed Edwin A. Mayes chief of the Engineering, Acquisition and Construction Section, and Montie Glover chief of the Budgets and Accounts Section full-time. Both had previously split their duties with the Park Board. Later that year Mayes was demoted to a position of "senior technician, statistician," when Bode became displeased with his administrative ability; William M. Hill took over his job as section chief. Mayes later entered the armed services and Bode recommended that his job not be refilled but that it be replaced with a new position, "coordinator of wartime activities," which was filled by Field Service Agent Jay B. Morrow.

The Department had been losing personnel to the armed services beginning in 1940, which necessitated some hirings and transfers. Joseph Jaeger Jr. was hired as a forester to replace one of the "first four" foresters, Edward J. Seay. Seay did not return to the Department after his military service. Jaeger later became the director of Parks. Conservation Agent Dorris Frazier was promoted to the Education Section, replacing Everett F. Evans. Frazier continued in the Education Section until his retirement in 1968.

Lookout Towerman Paul G. Brooks Sr. replaced Frazier as conservation agent. Brooks eventually rose to chief of the Protection Division. Another lookout towerman, hired in 1942, was Herschel P. "Woody" Bledsoe, who later served as operator of the Showboat, and eventually fought forest fires with a guitar as "Woody the Singing Forester," in the Information Section.

Robert F. Wells was hired as construction superintendent and Robert O. Danson as nurseryman at Meramec State Forest Nursery. Ellen Markward took over the Nature Knights program in Education.

The Department's two fisheries biologists—Dr. W. C. Frohne and Albert E. Weyer—left for wartime duties with the U. S. Public Health Service. Aden C. Bauman was employed to continue Frohne's stream surveys, and later became the chief fisheries biologist. Frohne never returned to the Department and Weyer did so only for a short time after the war.

As manpower shortages grew—the Department eventually had fifteen percent of its staff in the armed services—the criteria for hiring

replacements had to be lowered. All employment was considered temporary, and new employees were warned that they might later have to pass examinations to retain their jobs.[1]

An interesting wartime forester hired was Rufus S. Maddox, who shunned retirement to do his bit. Maddox was sixty-seven years old when he was hired as a farm forester; he was a graduate of the Yale Forestry School in 1907 with a master of forestry degree in 1909. He had been a professor of forestry in Pennsylvania, Tennessee and Virginia and served with the Civilian Conservation Corps from 1933 to 1942. He eventually retired from the Department in 1945 at the age of seventy.

Many activities had to be curtailed, as travel restrictions due to gasoline and tire shortages worsened. Conservation agents using horses for their enforcement patrols were voted $2.50 per day extra, but had to support their claims with receipts. Materials shortages halted construction projects in most cases. The State Fair and St. Louis Sports Show had exhibits, but both were canceled in 1943 and 1944. The Showboat managed 290 showings, however.

State Forester George O. White was appointed state coordinator of the Forest Fire Fighters Service in the Office of Civilian Defense. Many personnel were in various civil defense volunteer posts, in addition to their regular duties.

Employees volunteered for duties on local



In the days before four-wheel-drive vehicles many agents in the rougher back country used horses to patrol. Agent L. N. Elson, above, worked in the east-central part of the state.

defense councils, county war boards, the aircraft warning service, draft boards and county rationing boards, and as air raid wardens, auxiliary policemen, firemen and highway patrolmen, in the state guard, and as sellers of war bonds and stamps.

As a war mentality gripped the home front, the Commission changed all time references in the *Wildlife Code* to "Central War Time." They declared forest fire lookout towers off limits to the public so saboteurs could not destroy them or use them for signaling. Later, they passed a regulation that forbid pursuing wildlife within 200 yards of Bagnell or Powersite dams at the request of the Federal Power Administration—again because of fear of saboteurs.

The Department began issuing bulletins under the general title of "Wildlife Goes To War," covering such subjects as use of waterfowl feathers and down, rabbit fur, fats from furbearers, and wildlife as a renewable food resource. Down went into flying suits and sleeping bags. Fats were used to make glycerin for high explosives.

Although Bode had anticipated a drop in revenue with so many hunters and fishermen off in the armed services, revenues actually rose in 1942. At year's end there were 189 employees, 145 of whom were in the field, with forty-four headquartered in the Central Office. There were twenty-nine men in service.

By 1943 there were forty-seven employees in service, including two women employees, and the sale of licenses had declined by twelve percent. There was discussion of relaxing rules to exploit fish for "war" food, and this was actually done in a few instances. The annual report boasted of 25 million pounds of game and fish for food, and furs were touted as adding to the war effort.

Lumber production increased markedly as the state produced more lumber than any north-central or Great Lakes state. Much of



When a war mentality gripped the nation, the public was barred from lookout towers like the Kelleter Tower near Sullivan to prevent sabotage or covert signaling.

[1] I. T. Bode and Commissioner Owen Turnbull clashed over one returning serviceman. Bruce Lewis was discharged in 1943 and assigned to a different job than he held when he entered service. He protested privately to Turnbull, and when the commissioner expressed dissatisfaction with Bode on this at the August, 1943 meeting, Bode tendered his resignation, stating that if the Commission had lost faith and confidence in him, it was best for the program that he resign. Turnbull immediately moved to accept the resignation, but got no second. Sydney Stephens exercised all his charm to smooth over the situation, and Turnbull withdrew his motion.



Timber production increased to help meet demand for the war effort. A sizable elm, above, harvested from the Meramec River bottoms, could have gone for blocking, railroad ties or crates. Missouri produced more lumber than any other north-central or Great Lakes state during the war.

this production was walnut for gun stocks for the armed forces, but Missouri produced railroad ties, charcoal, hardwood lumber and dozens of other timber products for the war effort. Special forest fire protection was being given to Weldon Springs TNT Plant, Western Cartridge Storage Area, Fort Leonard Wood and Camp Crowder. An organization known as "Teepee Weepee," the Timber Production War Project, was begun in August, 1943, under the direction of Milton G. "Gus" Hoyer of the U. S. Forest Service. Hoyer later was to become an assistant state forester with the Department.

By 1944 there were sixty-four employees in the armed services, including three women. Five federal aid project leaders were lost to the war and only three replacements could be found. Thus a number of projects were curtailed or suspended.

The Office of Price Administration, the federal agency charged with preventing scalping in scarce commodities, established the ceiling prices that could be charged for hunting ammunition (if you could find it):

Shotgun Shells	**Price Per Box**
12 gauge	$1.38
16 gauge	1.32
20 gauge	1.32

Rim Fire Cartridges	
.22 Long Rifle, Regular	.34
.22 Short, Regular	.21
Center Fire Cartridges	
.25-35 Winchester	1.41
.30-30 Winchester	1.46
.30 Remington	1.46
.300 Savage-Remington	1.85
.32 Winchester Special	1.46
.35 Remington	1.64
.270 Winchester	2.10

The plight of the sportsman in wartime was humorously depicted in a little essay that appeared in an April, 1944, issue of *Missouri Wildlife.*

"Opening day we took our trusty fowling piece, our shotgun shell, and our dog and hied ourself to the golden fields of kingly sport. We nervously unwrapped the carefully hoarded shell and started to place it in our gun.

"Just then a sinister looking individual stepped from behind a tree and thundered in our ear: 'Did you sign WPB special quota certificate No. 6 for that shotgun shell, allowed under paragraph (C) of supplementary limitation order L-286-A, stating that you were purchasing it for your own personal use for shooting predatory and destructive animals and birds only?'

"Before we could answer, another scowling gentleman stepped forth saying, 'I'm from the Office of Price Administration. How and where did you get the gas to come out here?'

"Then a conservation agent approached and asked to see our permit and to check our gun to see if it was plugged for only three shots.

"Just as we were offering him our gun, dog and car, the farmer bellowed, 'Get the h--- out of that field!'"

Things were rough for the poor sportsman.

Even in wartime prosaic things appeared on the scene. The Commission adopted an official insignia in 1942, the old hawthorn blossom. Shoulder patches were issued to each field man, two of which he was to be required to pay for. (This requirement was later rescinded.) Each patch had a cross bar beneath the hawthorn blossom with the section or division name on it.



The familiar hawthorn blossom insignia was adapted by an unknown artist to honor the state flower; it was replaced in 1970 by the triangular motif of fish, forestry and wildlife designed by Charles Schwartz.

The Commission created the Master Conservationist Awards late in 1941, and in 1942 set up the procedure for conferring them. A committee composed of former Commissioner John F. Case, J. T. Montgomery and Roland M. Hoerr of the Conservation Federation of Missouri, C. M. Tucker of the University of Missouri botany department and Dr. J. V. Brown of Kansas City was asked to suggest people eligible for the awards.

The Mississippi Valley Trust Company offered to underwrite the awards up to $200 annually, but the Commission declined this offer.

In July, 1942, the awards committee came up with twenty-seven nominations. The chief of the Education Section was given the task of administering the program, with Protection Chief Asbury Roberts investigating the nominees. The committee finally settled on four people to receive the award. Awards were presented at the State Fair in Sedalia to Edward K. Love of St. Louis, Eugene M. Poirot of Golden City, Rev. George J. Hildner of Villa Ridge and Harry A. Plattner of Malta Bend.

Poirot and Plattner were farmers who used their lands to demonstrate advanced

conservation farming methods. Rev. Hildner was a Catholic priest who preached conservation to his parishioners and was active in soil erosion control work. Edward K. Love was a St. Louis philanthropist who created the Love Fellowships in Conservation at the University of Missouri.

In 1943 the award was given to six people: Dorris D. Brown of Warrenton; Morton Tuttle, Prairie Home; Roland M. Hoerr, St. Louis, (the man who first started the ball rolling toward a non-political commission); Eugene M. Hills, Cameron; E. J. Evens, Amsterdam; and posthumously to "Uncle Mon," James T. Montgomery of Sedalia, the man who broadened the Federation's view beyond hunting and fishing.

In 1944, Robert A. Langenbacher of St. Charles, Robert F. Redmond of Carthage, and Wayne Short of St. Louis were named Master Conservationists. The following year saw Ted Butler, Springfield, John Case, Savannah, and Allen McReynolds of Carthage honored.

B. K. Leach, president of the Egyptian Tie and Timber Company, raised turkeys as a sideline by penning semi-wild hens in the woods where they could be bred by wild gobblers. The offspring were bought by the Department and experimentally stocked in various areas. Some 500 were stocked in 1942 and 1943, but the greatest reliance was placed on stockings with native wild birds that were live-trapped and released.

One important wildlife research project begun during the war year of 1942 was the establishment of two quail study areas between Columbia and Jefferson City. One area received regular stockings with pen-reared quail, and the other area, one and one-half miles away, was monitored only for its quail population. The intent was to determine the value of stocking pen-reared quail. At the end of the study three years later, it was found that the area that did not receive quail stockings had as many or more quail than the area which was stocked. Only two banded,



Recipients of Master Conservationist Awards posing with the Commission and Director Bode in 1942 were, left to right, Commissioner Sydney Stephens, Edward K. Love, Commissioner Owen Turnbull, Rev. George Hildner, Commissioner John Case, Eugene Poirot, A. P. Greensfelder, Harry Plattner and Bode.

stocked quail were killed in three years.

In July, 1941, Governor Forrest C. Donnell reappointed Stephens to the Commission for a six-year term and Owen Turnbull of Troy was appointed to replace Wilbur Buford, whose term had expired. In 1943, Donnell appointed Edward K. Love of St. Louis to the Commission, to replace A. P. Greensfelder, who was the first commissioner to serve a full six-year term. In 1945, Governor Phil M. Donnelly appointed Robert A. Brown of St. Joseph to replace Glen E. Stoner.

Owen Turnbull was an auto dealer and vice-president of the Midwest Fox Hunters Association. As a commissioner he was in a hot spot, because at this time farmers were claiming that foxes were too numerous and demanding they be killed off. For a fox hunter there are never enough foxes. The Commission was in almost continual hot water between the farmers and the fox hunters.

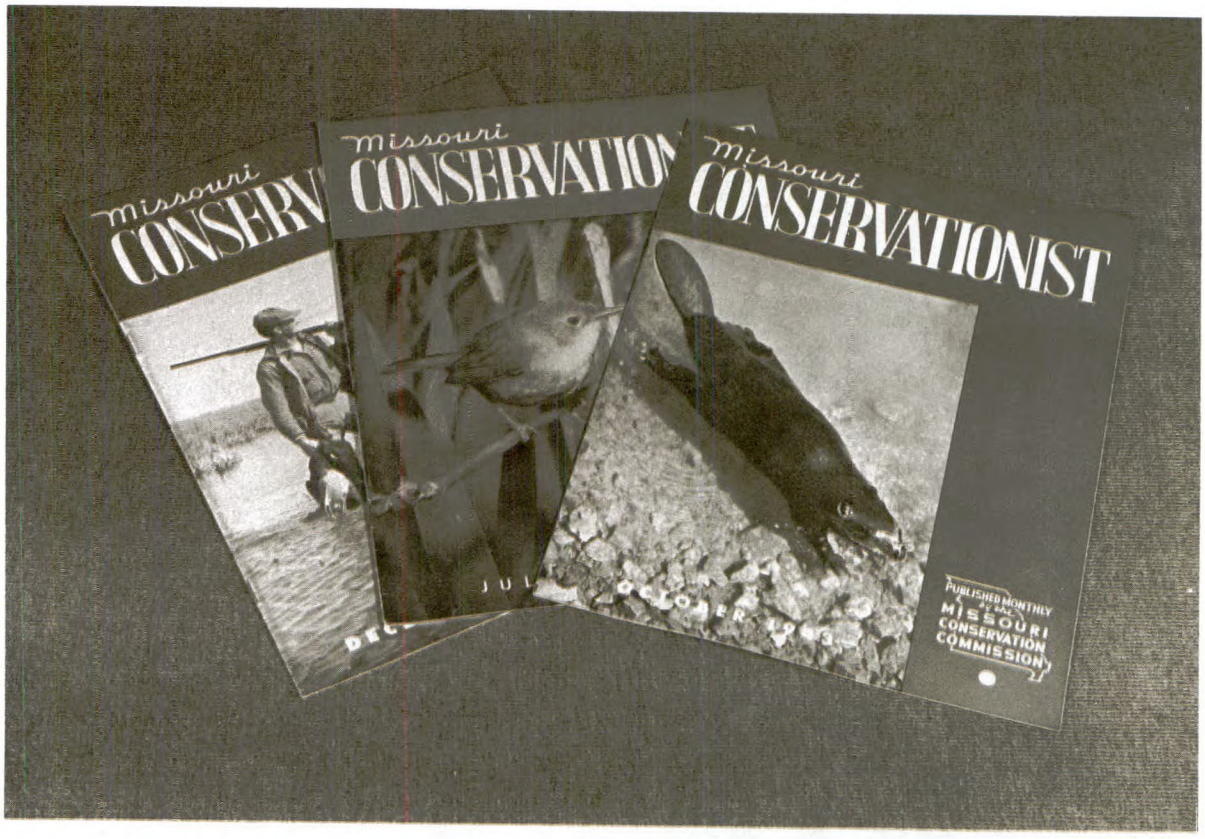
The staff recommended the daily twenty-five cents trout fishing fee in the state parks be raised to fifty cents, but the Commission refused to do so. It did authorize the use of a siren at the parks to announce the fishing hours. Bode also wanted a single hunting, fishing and trapping permit for $1.50, but the Commission "did not want to impose any changes of this kind during the existing emergency."

The Commission was concerned about public feelings relative to its programs. In May, 1942, it called a meeting of its four field service agents, six district supervisors, Asbury Roberts and Arthur L. Clark to ask their opinion as to how the public perceived Department programs. Their general feeling was that the public was favorable, that wildlife was increasing and that the Department was being credited with the progress.

Keeping tabs on the public got a jolt in 1942, when the state auditor refused to honor bills for a clipping service or subscriptions to newspapers.



Bode wanted to establish a single permit for fishing, hunting and trapping for $1.50, but the Commission declined to adopt changes during the war. Missourians escaped the strife abroad by finding peace on a farm pond.



Reader support allowed the Conservationist *to publish monthly in magazine format in 1943. Attempts to charge for the subscriptions were short-lived—the magazine has remained free to residents ever since.*

In April, 1943, the *Conservationist* magazine appeared for the first time in magazine format. It had a circulation of 10,000 with its first issue.

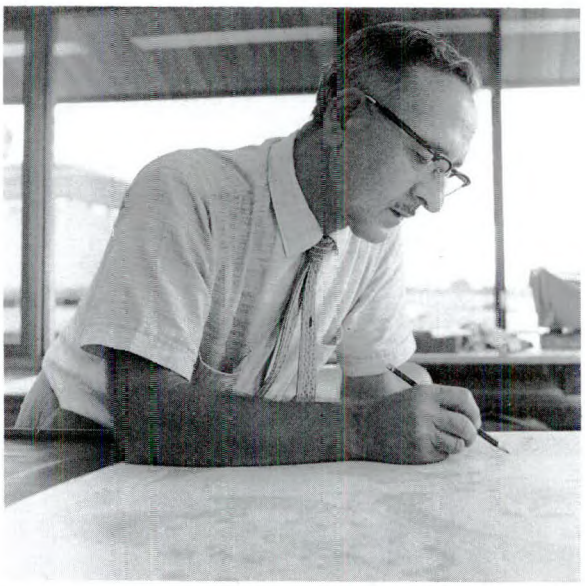
Staff Writer Dickson Terry, who went on to a career with the *St. Louis Post-Dispatch*, resigned in August, 1942, and Charles H. Callison was promoted to replace him. Callison served as Information chief when Harold Clover went into the armed forces. He later resigned to work as executive secretary for the Conservation Federation, and went on from there to a distinguished career with the National Wildlife Federation and National Audubon Society. In 1953, he was commissioned to write a history of the campaign that brought the non-political Conservation Commission into being. This was the book *Man and Wildlife in Missouri.*

Paul Q. Tulenko became state project leader with the resignation of Lisle Jeffrey in 1943. In the same year, the biologists studied how run-off was contained by small lakes in comparison to large lakes proposed for the Meramec River Basin. This study was completed in 1944, along with the soil survey of the state begun by Arthur Hugh Denney in 1939.

In October, 1943, the Commission conducted a public meeting in St. Louis to investigate charges against Bode and Clark brought by some disgruntled sportsmen. The Commission completely exonerated both men of any wrong-doing.

That same year the first ten-year service awards were made to eighteen men, all holdovers from the old Fish and Game Department.

The death of Fish, Game and Forestry Chief Arthur Clark in 1944 marked the end of an era. He had gone to North Dakota to pheasant hunt at the invitation of Melvin O.



Paul Q. Tulenko began his career with the Department in 1940. He became Game chief in 1946, and held posts as federal aid coordinator and landscape architect.

Steen, who was U. S. Fish and Wildlife Service regional inspector for Pittman-Robertson projects. The hunt was to be Clark's first real vacation since his employment with the Department in 1938. Nash Buckingham, outdoor writer from Tennessee, was in the party and wrote about Clark's death in his book *Game Bag*.

Clark had a cold when he arrived in Bismarck and visited an ear, nose and throat specialist the day before the opening of pheasant season. But the next day, September 20, 1944, he had difficulty getting his breath on several drives, and stayed in the car for a time.

That afternoon he got tired of being left out and joined Buckingham and two others on a pheasant drive. Nash described what came next:

"We three tramped a couple of hundred yards up a slight, sagey slope to gain the [wheat] patch. Harold [Siebens] swung to its left side. Arthur and I, thirty feet apart,



Melvin O. Steen, left, became chief of Fish, Game and Forestry after the death of Arthur Clark. In this 1940 photo, Steen converses with A. Hugh Denney, one of the first biologists hired by the Department.

stepped off across a low wire fence to take our stations and space up the drive correctly.

"As I paused at the corner, Arthur had just cleared the barrier. 'Buck,' he called, and smiled at me when I turned around. 'This is certainly a pretty place for pheasants.'

"'It sure is, Art.' I replied, and turned to study the exquisitely sun-tinted rim of a distant moraine. I'll never know what vague premonition drew me to glance sharply around—but I did, and Arthur Clark was not there—just to my left at field's edge. Perhaps what startled me, for my hearing is not as keen as of old, might have been the clatter of his falling gun. I leaped past the view and saw him stretched face downward in the clipped wheat stubble.

"Kneeling swiftly and shouting for Siebens, I lifted Arthur and caught him into my arms. The sharp, stiff stubble-brush had scratched and bloodied his left cheek. But on his face there was only an uncontorted, peaceful half-smile. And when he sighed faintly and relaxed, I knew, somehow, that the end had come with beneficent swiftness and mercy."

State Project Leader Paul Q. Tulenko, Biologist Bill T. Crawford, Acting Field Service Chief James D. Beets, and professor Rudolf Bennitt went to Bismarck to take charge of the body. Clark was estranged from his wife and when the family was contacted, it was learned that in his will he had ordered that his remains be cremated and strewn in the Missouri River.

James D. Beets took the body to Minneapolis, site of the nearest crematorium, then returned to Bismarck with a cardboard box containing the remains. The small party took the box to the location of the present Garrison Dam and consigned the ashes to the river. As Crawford put it, "Just a bunch of the boys taking care of their boss." None of Clark's family appeared.

Oddly enough, it was hunting companion Melvin O. Steen who took Clark's job. Steen, a North Dakotan by birth, had been educated at Concordia College and joined the U. S. Fish and Wildlife Service (then the Bureau of Biological Survey) in 1934. He had been involved in early pheasant stocking work in the Dakotas and was looked upon as an expert on pheasants. He had been a regional inspector with the U. S. Fish and Wildlife Service since 1939 and knew Missouri well. He applied for and got Clark's former position in December, 1944.



Arthur Clark was an editor and Fish and Game commissioner of Connecticut before accepting a job with the Department in 1938. He died while pheasant hunting in 1944.

In 1944, the first deer season in seven years was held on November 4 and 5 in seventeen counties. An estimated 613 deer were killed by 7,557 licensed hunters, including what was claimed to be the first bow-and-arrow kill in modern times, in Dent County.[2]

The next year some 11,191 licensed deer hunters bagged 882 legal deer in a three-day season. The deer restoration program was beginning to pay off in recreation.

A commercial fisherman named Benton Masters was hired to remove rough fish by commercial fishing methods from Lake of the Ozarks in an experiment aimed at improving sport fishing.



The dawn of the modern deer season occurred in 1944 with the first hunting season in seven years. L. N. "Pop" Elson, above, stamps a deer carcass during hunting season in Gasconade County.

Another experiment involved predator control, to take some of the heat off the Commission caused by farmers protesting foxes and coyotes. Herman Dulworth, who had six "wolf dogs," was employed to cut down on coyote populations. He managed to kill thirteen coyotes in nine counties before the project was abandoned in 1945.

In that year the extension trapper program began as a cooperative endeavor of the Department, U. S. Fish and Wildlife Service and the Agricultural Extension Service. It was the beginning of what came to be known as the "Missouri system" of predator control, where farmers were trained in an extension-type program to trap the individual predator causing the problem, rather than warring on the species.

Despite the war, farm pond building continued to increase and the first farm pond studies were begun in areas like fertilizing, fish stocking combinations, forage species and bait minnow production.

Also in 1944, the field service agents were formed into a section assigned to the Administrative Division, with Jay B. Morrow as chief. In December of that year Forestry was split away from Fish and Game Division

[2] Retired Field Service Agent Paul Jeffries who, perhaps more than any other single person championed bowhunting in Missouri, claims that the deer actually had been shot with a .22 caliber rifle and was given to a group of archers to pass off as an archery kill. It wasn't until 1952, when Jack Compton of Ferguson killed a small buck on the Cletus McClanahan farm in Ste. Genevieve County, that a completely authenticated archery deer kill was recorded.



A predator control system attempted in 1944 involved Herman O. Dulworth, left, and his "wolf" dogs. Field Service Agent Gilbert Maschmann, right, helps carry one of Dulworth's coyote catches.

and given divisional status, with fifty-three full-time employees. That same year two-way radios began to be used by Forestry personnel.

In 1944 the attention of both the Conservation Commission and the Federation was focused on the Constitutional Convention and its possible effects on the non-political Department. Two proposals to change the Conservation Commission were especially worrisome.

Proposal No. 145, introduced by Omer E. Brown and Oliver D. Downes, would have done away with the four-man commission, replacing it with a single commissioner elected by popular vote with no reference to political party. The commissioner would hire a director and other employees, who would be equally divided between the two major political parties. Seasons and other matters would be enacted by the legislature.

Proposal No. 200, introduced by Clyde C. Cope, would increase commissioners to six, whose terms of office would be regulated by law. The Supreme Court was given powers to determine the "reasonableness" and "lawfulness" of all rules and to make necessary orders requiring obedience to the decisions of the Court in relation thereto. The legislature would fix the terms of commissioners, and the governor could remove any commissioner.

Both these amendments were so full of holes that neither really stood much chance of passing the constitutional convention committee or the voters, but the Conservation Federation always believed in running scared.

The Federation lobbied effectively and all the proposals that would have changed the Commission in any way were beaten back. When the 1945 Constitution was passed, its provisions for the Conservation Commission were exactly as passed by the voters in 1936.

By 1945 there were sixty-nine people in the armed forces[3] and hunting and fishing permit sales had risen nineteen percent. The Commission repealed its restriction on fishing within 200 yards of a dam and reduced it to seventy-five yards. Forest fire losses, which had a twenty-two percent reduction in 1944, rose as people began returning from the war. Forest fires burned 58,000 acres in 1944, and in 1945 the amount grew to 81,000 acres. The woods had missed the firebugs. One forester opined that perhaps the drop in fire losses during the war only reflected a decline in reporting fires because of the manpower shortage.

The State Fair resumed in 1945 and the Conservation Department presented a new exhibit.

As the war ended in 1945, the Commission ordered the staff to step up a lake development program to create more fishing water. It was determined that stream improvement was too difficult a task for the Department, but creation of new fishing waters near where people lived was a worthy endeavor. The freeing up of men and materials would allow new lakes to be built. The Development Section was transferred from Forestry Division to the Fish and Game Division as part of the

[3] Eventually, seventy-one regular employees entered the armed forces.



Forest fire losses declined by twenty-two percent during the war, only to rise again when populations returned to civilian life.

lake construction program.

Both the Commission and staff looked forward to progress in conservation in the post-war years. While the Department had not been inactive during the war, it had held back on many programs that it was now eager to accomplish.

As I. T. Bode wrote: "It was time for appraisal of the job ahead, and for planning for the impact on wildlife resources when travel restrictions are lifted, ammunition and tackle again are unlimited, and service men and women come home and go hunting and fishing."



*Charles Coatney was involved in deer trapping in 1943, when this photo recorded him at Caney Mountain with a catch of another sort, a red wolf (*Canis rufus*).*

Bode's Last Years

Hunt and fish they did! In 1946 the number of hunting and fishing permits soared to 632,737—an increase of thirty-eight percent over 1945—probably the largest single year's increase in history. Almost certainly this reflected the return of servicemen, who wanted to enjoy themselves in outdoor sports, and the increased availability of civilian firearms and ammunition and other sporting tackle.

Callison states that from 1940 to 1950, while the state's population rose four and one-half percent, the number of hunters and fishermen increased by 120 percent.

The Commission, which had steadfastly refused to raise permit prices during the war, was faced with rising costs and the necessity of adding personnel in an inflationary period. In 1947 it voted a general increase in fees. The fishing permit went from $1 to $1.50, hunting and trapping from $2 to $2.50, hunting, trapping and fishing from $3 to $4, county hunting, fishing and trapping from $1 to $2, and deer hunting from $3 to $5; the Commission also created an archery deer hunting permit for $5.

The lake program begun in 1945 represented a shift in thinking on the part of Bode. When he first became director he held the opinion that the proper role of a fish and wildlife agency was that of advisor and arbiter between sportsmen and landowners, that wildlife was mostly a product of private lands and that no state agency could own enough land to make much difference in the great need for recreation. Thus, emphasis was on extension-type services to private landowners.

He approved some land acquisition for refuges and demonstration areas, including some state forests, but generally opposed the Department taking on too much land. Arthur Clark had shared these sentiments, but Melvin O. Steen and State Forester George O. White had no antipathy to the Department owning land.

Gradually Bode came around to the opinion that the Department could contribute in fisheries by providing public waters where fishing opportunities were otherwise limited. This was the so-called "big lake" program. It was voiced in a policy statement of July, 1946.

Under the policy, land for lakes of one hundred acres or larger would be acquired by the state. Sites for lakes twenty to one hundred acres would be acquired by the community and turned over to the Department for construction. Lakes under twenty acres would be acquired and built by the communities, with the state providing engineering and management advice. Priority would be given to north Missouri, where fishing waters were more limited than in southern Missouri.

The first "big lake," 273-acre Lake Paho in Mercer County, was the first lake built under the new program. Acquisition began in 1948. "Paho" is an Indian word for "first." It was opened to fishing on July 1, 1951.

It wasn't until 1955 that the Department was able to take on a "small lake" program, which became known as the "community lake" program. The first community lake was Jamesport Lake in Daviess County, started in 1955-56 and opened to public fishing May 29, 1958.

Steen launched a wetlands survey of the state, and as a result began buying land for what was to become Fountain Grove Wildlife Area. The Department bought its first upland game area, the August A. Busch Wildlife Area, with a $70,000 donation by Mrs. August A. (Alice E.) Busch. The land had been part of the wartime Weldon Spring TNT Plant.[1] Forestry Division steadily added acreage in the form of state forests and tower sites, but land acquisition remained a low priority affair throughout the Bode regime. However, some twenty-nine major areas were acquired from 1937 through 1956, eighteen of them after World War II. When, in 1946, the Anglers of Missouri organization asked the Commission to begin a program of buying accesses to

streams, the matter was deferred.

In 1946, the Sixty-third General Assembly came up with two landmark pieces of legislation to the benefit of the Department and its programs. The Wildlife and Forestry Act of 1946 did away with the old 1939 statutes, under which the Department prosecuted its cases, and created a whole new set, recognizing the Conservation Commission as the body that made the rules and regulations. It made violations of Commission rules misdemeanors and provided penalties. It gave the wildlife conservation agent broad powers to help enforce the rules, and the duties of magistrates and court officials were set out.

The Sixty-third General Assembly also passed sweeping forestry legislation, including the forest cropland law, and for the first time appropriated general revenue funds—$150,000—for forestry purposes. Up to 1946, the forestry program had been financed with fifteen percent of the Department's hunting and fishing license funds, plus some federal monies. Department money continued to



A planning meeting in Willow Springs was recorded by the Willow Springs News *in 1946. Seated left to right are: Leonard Rowe, Field Service agent; James Bailey, district supervisor; Jay Morrow, Field Service chief; Paul Tulenko, Game Section chief. Standing: George Laun, refuges supervisor; LeRoy McGeehee, fish hatchery superintendent, A. R. Mottesheard, Field Service agent; William Towell, forester; Dorris Frazier, education advisor; Asbury Roberts, chief of Protection.*

[1] The University of Missouri acquired another part of the lands at the same time. The federal government retained a small portion where, in 1957-66, processing of uranium and thorium was conducted. After the Conservation Department acquired adjacent Weldon Spring Wildlife Area from the University of Missouri in 1979, it was discovered that radiation and nitrate contamination on Weldon Spring and also the Busch Area were emanating from dump sites on the federal lands. The U. S. Department of Energy is to clean up all contamination sources in the late 1980s.

support forestry work in the state, but the general revenue funds permitted expansion of the forestry program.

Bode created a Game Section within the Fish and Game Division and promoted Paul Q. Tulenko from state project leader in Federal Aid to the post of Game chief. Maurice Baker was named state project leader. Dr. W. C. Frohne, who had worked with the U. S. Public Health Service during World War II, declined to return to the Department following the war and in October, 1946, Aden Bauman was designated as chief fisheries biologist.

Bauman was killed in an airplane crash on August 31, 1947, while inspecting experimental farm ponds. Paul G. Barnickol returned to the Department the next April as chief fisheries biologist.

Two biologists who were to earn national honors for work with the Department were hired in 1946, Jack A. Stanford and LeRoy J. Korschgen. Stanford became famed for his work with bobwhite quail and Korschgen for his expertise in wildlife food habits. Two foresters, William E. Towell and Arthur Meyer, returned from service with the U. S. Navy. Towell was promoted to assistant state forester in charge of fire control, and Meyer to assistant state forester in charge of timber management.



Arthur B. Meyer became the first farm forester in 1940. After the war, he returned to the Department to become assistant state forester in charge of timber management.



Aden Bauman, who became chief fisheries biologist after the war, was killed in an airplane crash while inspecting farm ponds in 1947.

Biologist Carl R. Noren returned from military service and was assigned to river basin studies and as liaison between the Department and the Corps of Engineers. The Corps was undertaking a host of flood control projects now that wartime shortages of men and materials had ended. The projects could have a profound effect on Missouri, and Bode wanted to keep an eye on them.

The Field Service Section was expanded to fifteen men, with agents assigned at St. Louis and Kansas City to work with sportsmen and other conservation groups in the state's



William E. Towell, whose career with the Department began as the first forester hired by George O. White in 1938, became assistant state forester in 1948, following naval service in World War II.

two largest metropolitan areas.

The Department finally got into aviation when Biologist Harold V. Terrill went to Hatbox Field, Muskogee, Oklahoma, to pick up a war surplus plane. Terrill had been a pilot artillery spotter in World War II, so he took on piloting in addition to his other duties. He was an enthusiastic and exuberant pilot who had a lot of close calls, and many were afraid to fly with him. Conservation Agent Allen Hoefelman had been a pilot/instructor during Word War II, and he gradually took over flying duties, which included enforcement, forest fire patrol, wildlife surveys and general transportation. In 1955 he became the Department's first full-time pilot.

In March, 1947, Bode organized an Information and Education Division, placing three units into one division with Dr. F. Olin Capps as division chief. Dorris Frazier was named chief of the Education Section, Harold Clover as head of the Visual Aids Section

Field Biologist Harold Terrill, poring over aerial maps, was imbued with the same enthusiasm for scientific wildlife management as the young Department for which he worked.



and C. Dan Saults as chief of the Publications Section. The following June, Clover resigned to set up his own motion picture company and Saults became chief of the Information Section, combining the Visual and Publications sections.

A more drastic reorganization was the creation in March, 1947, of a Field Division that embraced the Protection Division and Field Service Section. Jay B. Morrow, who had been Field Service chief was named chief of the new division. Vernon Bennett was made chief of the Protection Section, Kenneth R. Hicks chief of the Field Service Section. This reorganized Asbury Roberts out of a job!

Roberts had been a difficult man to get along with as chief of Protection. He had been continually feuding with Arthur Clark when Clark was head of the Fish, Game and Forestry Division, and the antipathy continued with Mel Steen. There was trouble between the conservation agents and biological staff as a result of the differences between Roberts and the other chiefs. Roberts was warned in August, 1946, that he had to straighten things out, but apparently he failed to do so.

He appealed the situation to the Commission, and a hearing was held on April 27, 1947. (This was the same meeting where Riley Gladden refused to testify about Roberts.) The Commission backed Bode and Roberts was discharged—the first high ranking officer of the Department to be fired. He had served a little over nine years. Roberts was generally respected, if not liked, by the conservation agent staff, but the rest of the Department disliked him and found him difficult to work with. Jay Morrow, as head of the new Field Division, brought back a measure of mutual respect and cooperation between the various divisions.

The 1946, Master Conservationist Awards went to Major General E. M. Stayton of Independence, Chester C. Davis of St. Louis and H. J. Waters of Columbia. In June, 1947, the Commission named Edgar M. Queeny of Monsanto Corporation a Master Conservationist at the same time it honored E. Sydney Stephens, and it was expected that Queeny would appear to claim the award at a testimonial dinner honoring Stephens in September. The award was based on motion picture work Queeny had done on prairie grouse. Apparently Queeny was not impressed with the award.



Jay B. Morrow rose from Field Service agent in 1940 to assistant director in 1949, where he lifted much of the day-to-day burdens from the shoulders of I. T. Bode. He died of a heart attack in 1956.

Queeny did not appear at the September dinner and declined to appear at other meetings or to acknowledge correspondence relative to the award. In March, 1948, the award was withdrawn, and Queeny became the first and only person to turn down the recognition.

In December, 1946, Melvin Steen launched a major wildlife food and cover program. The farm pond program and earlier Korean lespedeza program had addressed some of the problems of farm game, but not all. Steen proposed a series of tests and demonstrations on various soil types to select trees, shrubs and vines that would have the best potential for bobwhite quail. He planned to put these practices on state refuges and field trial areas sponsored by sportsmen's groups. The plan called for work with the Soil Conservation Service and State Agricultural Extension Service with the eventual aim

of getting these practices adopted by the Production Marketing Administration (formerly Agricultural Adjustment Administration) so that landowners could receive payments for such practices.

Featured plants were multiflora rose as a living farm fence, with plantings of bicolor and sericea lespedeza as wildlife food plants, and Reed canary grass as an erosion control plant.

July, 1947, marked the end of Stephens' second term as commissioner. He had served ten years and was sixty-six years old. Frank P. Briggs of Macon was named by Governor Phil Donnelly to replace Stephens, and Dru L. Pippin of Waynesville was named to replace Owen Turnbull, whose term also expired.

Briggs had been campaign manager for Donnelly in his gubernatorial campaign and was a college classmate of his. He was publisher of the *Macon Chronicle-Herald* and had been in politics a long time. He was former mayor of Macon and had served as a state senator, resigning from the state senate to accept an appointment as U. S. senator to fill the vacancy created when Harry S Truman resigned to become vice-president. He served out Truman's term but failed to be re-elected on his own.



Edgar B. Biffle headed the Department's first major wildlife food and cover program.

Dru L. Pippin had experience as an agricultural extension agent and a Federal Land Bank appraiser. He operated a farm/resort on the Gasconade River and an insurance business. Both men were Democrats.

Only a few days after Donnelly announced the appointments and before Briggs or Pippin had attended a Commission meeting, the Democratic State Committee's publicity man, Cance Pool, issued a news release charging Bode "has ruled the Department in a high-handed fashion" and favored Republican employees.

Reporting on the appointments of Briggs and Pippin to the Commission, the release said their selection "was expected to usher in a new era in state game conservation, which has been far from successful in past years." It was probably this statement, and a later one made by Republican Party publicity man Gene Powell, that caused many to think that Briggs and Pippin had been appointed to "get" Bode and turn the Department back into politics. Such was a widely held belief of Department employees at the time.

Pool's statement charged that sportsmen believed that game and fish were scarce in Missouri "as never before and many of the policies and practices of the state Commission have brought about this undesirable condition."

The release said criticism of Bode was widespread. "Bode, an Iowa Republican, has never enjoyed the confidence of Missouri sportsmen," the release declared. "He has ruled the Department in a high-handed fashion, indulging in favoritism, especially in behalf of members of his own party. As a member of the State Park Board, for example, it is reported that virtually all of nearly 200 persons recommended by him for park positions are Republicans."

In response to the charges Bode challenged anyone "to find a staff member who has been asked what his politics are before



Dru L. Pippin was appointed commissioner in 1947. Pippin was an avid outdoorsman and strong commissioner who helped formulate opposition to dams on the Current River.

getting a job. There are two things we never inquire into when we hire anyone—his politics and how he worships."

Bode said he made very few recommendations to the State Park Board, of which he was an uncomfortable member along with Gov. Donnelly and Attorney General J. E. Taylor, both Democrats, because he knew the Park Board was political.

As to the description "Iowa Republican," Bode said, "I suppose I have voted the Democratic ticket as many times as I have voted the Republican ticket."

A few days later, the Republican State Committee's Gene Powell issued a press release. "The Governor is willing to sell the conservation program down the river for a few jobs to buy votes. That is why he appointed Frank Briggs to the Commission, Briggs no doubt having orders to fire Bode and hire more Democrats."

This angered Gov. Donnelly, who held a press conference to state that he had not authorized the Democratic release and charged the Republican press release was "a vicious and unwarranted personal attack upon me."

Donnelly said his only reason for appointing Briggs and Pippin was "to provide strong



Frank Briggs, left, and Robert A. Brown, right, were members along with Dru Pippin and Clifford Gaylord of a strongly activist Commission.

members to succeed those whose terms had expired, purely in the interest of efficiency, and on behalf of true conservation in Missouri. I deplore the political tenor of recent statements made on this matter by both state committees."

The Commission met on August 13 and transacted business with no political fireworks at all. The evening before, Briggs and Pippin had issued a statement: "We are agreed that the management of our wildlife and natural resources by a non-political Commission is fundamentally sound and will be maintained as such as long as we have a voice."

Still the attacks continued. Cance Pool, unhampered by any facts, had a high old time finding fault with the Department and its programs. Finally Bode wrote to each of the commissioners, asking for a "sweeping and searching investigation, not only of such rumors, reports and attacks, but of every phase of the Department's activities and its personnel since establishment.

"I respectfully suggest and request that such an investigation be conducted in the open and that the public and the press be invited to be present. I request this in the name of common justice, to me, to my fellow workers, to the Commission and to the people of Missouri, all of whom are entitled to the facts and the truth."

Robert A. Brown Jr. of St. Joseph, acting chairman of the Commission, set a date of October 13 in the House chamber of the state Capitol for the four-man Commission to conduct an inquiry and invited anyone interested to appear. Cance Pool was specifically requested to present his charges, and the Federation asked the Democratic State Committee to order his appearance.

Pool hooted at the Commission inquiry, charging it was "doomed to failure as a glaring and deliberately pre-arranged farce following which a generous portion of 'whitewash' will be applied."

As for appearing at the inquiry, Pool declared he had "no intention of becoming a performer at Boss Bode's fish and game circus. It will be Boss Bode's show from beginning to end," Pool said. "He will serve as ringmaster, as prosecutor, as judge and as jury. And at the conclusion none may doubt but what Boss Bode and his administration will recommend themselves most highly."

Commissioner Frank Briggs disapproved the method of inquiry set up by Chairman Brown, stating that he thought a special four-judge court—two Democrats and two Republicans—should be appointed by the governor, with Attorney General J. E. Taylor acting as prosecutor. But he agreed to carry on with the inquiry set up by Brown rather than delay the thing.

A parade of witnesses appeared before the Commission, every one supporting Bode and the Department's programs. Most telling witness was L. F. Gingery, secretary of the fox hunters association, who had been one of the most outspoken opponents of the conservation amendment. He declared that after watching the Commission operate he had changed his mind and felt the programs were fair and sound.

Gene Powell, the Republican party publicity man, appeared to testify that the Republican State Committee had answered Pool's

charges because, "It thought that Cance Pool was setting the stage for a grab to make the Commission partisan." He said that Republicans generally thought the fish and game program had been operated on a nonpartisan basis. To Pool's charge that fish and game had declined, Powell stated that he had no trouble catching his limit of smallmouth bass near Jefferson City and he understood that deer and quail also were more plentiful than previously.

Former Commissioner Sydney Stephens testified that he considered Bode "the peer of any director in the country." He declared that he had never known Bode's political affiliations and that the Commission had at all times been careful to avoid making political affiliation a requirement for staff employment.

The inquiry lasted two days and not a single witness came to complain. Bode and the Department were completely exonerated. In January, 1948, the following note was inserted into the minutes of the Commission:

"The record of the investigation held in Jefferson City on October 13-14, 1947, as a result of the charges made against the Commission and its Director, has been carefully studied by the Commission. The Commission finds no evidence to support any of the charges and therefore finds that the charges are without foundation and it hereby expresses its confidence in its Director, I. T. Bode."

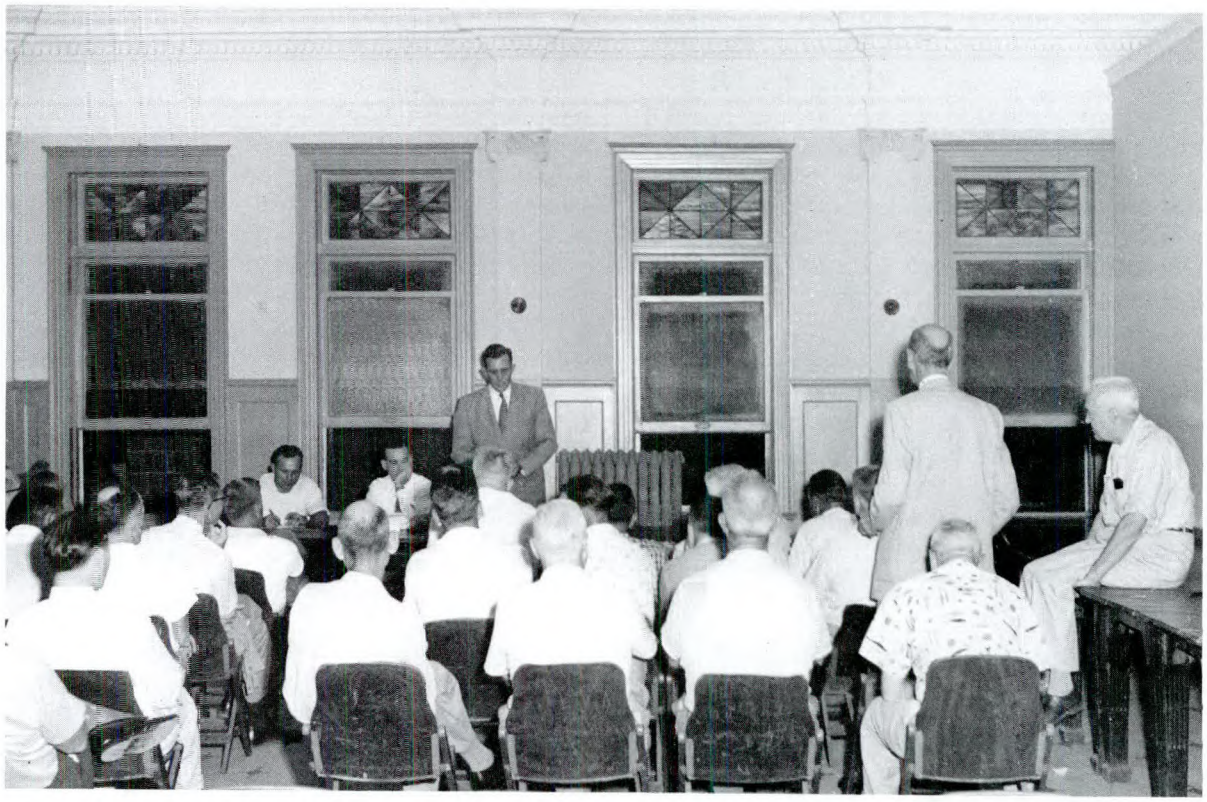
At the same meeting, Bode and Biologist Harold V. Terrill were recognized for having completed ten years with the Department (actually in 1947), the first employees to complete ten years service with the Conservation Commission. A certificate and pin were okayed for future recognitions of service.

In May, 1948, Bode established a system where new employees of the Department were to spend two days in the Central Office to acquaint them more speedily with all the various operations. This was the forerunner of the orientation given new employees today.

In September, 1949, the procedure for



The staff and their units in 1949 consisted of, left to right: Forrest Olin Capps, Information and Education; Paul Tulenko, Game; Kenneth Hicks, Field Service; George O. White, Forestry; George B. Herndon, Fisheries; Melvin Steen, Fish and Game; Jay Morrow, assistant director; I. T. Bode, director; Montie Glover, Budget and Accounts; J. Warren Smith, Development; Dan Saults, Information; Vernon Bennett, Field; Dorris Frazier, Education; and James L. Bailey, Protection.



A regulation meeting held in St. Joseph in 1955 solicited input from citizens concerned with the effect of Department policies on game populations.

establishing regulations was formalized. A regulations committee was formed, chaired by the assistant director and composed of the chiefs of Fish and Game and Field divisions and the legal counsel. In later years, representatives from Forestry Division, Information and Natural History also were members, so as to reflect the broadened interests and constituency of the Department. Today the regulations committee is composed of the deputy director, assistant director for Fish and Wildlife, legal counsel, and representatives from Protection, Fisheries, Wildlife and Forestry divisions, plus Public Affairs and Natural History sections.

An interesting sidelight into employee relations at this period was the decision to restrict employees' participation in the deer season and hunting at newly opened Fountain Grove waterfowl hunting area. In September, 1949, the Commission ruled that a Department employee "on his own time may participate in the deer season but only on the third and fourth days of the season, and must do so in a county other than the one in which he is headquartered." He was allowed to hunt at Fountain Grove also, on his own time, but "applications from the hunting public will be given preference. Any employee participating in the deer season or using the Fountain Grove area shall wear no clothing or insignia or otherwise identify himself as an employee of the Department," the policy stated.

As late as 1960, the Commission ruled that Department employees might not participate in the wild turkey season, though this was repealed the following year.

E. Sydney Stephens died October 17, 1948, and the Commission saluted its first chairman with the words:

"The State of Missouri acknowledges with pride the credit he brought to it and the high place of leadership and respect he won

in the nation. We have said our last 'God speed' and 'happy hunting' to a kind and generous friend—a man whose memory will live so long as kindness, gentleness, gracious fellowship, wisdom and high sportsmanship shall live."

Master Conservationists in 1948 were Leonard Hall of St. Louis, Mrs. Virginia Dunlap of Rivermines (the first and only woman to be so honored) and Jim Stone of Neosho.

In June, 1949, the Commission created an assistant director post and named Jay B. Morrow to it. Morrow had been serving as chief of the Field Division, and was succeeded by Vernon Bennett. In June, 1950, James L. "Red" Bailey became chief of the Protection Section.

Undoubtedly the pressures of the job were weighing on Bode, and Jay Morrow took over many of the public appearance functions that had been Bode's.

In August, 1949, General Clifford W. Gaylord, St. Louis industrialist, replaced the aged and ailing Edward K. Love as commissioner. He became a part of what many consider to have been the "strongest" Conservation Commission to date. It was composed of Democrats Frank P. Briggs, Dru L. Pippin, and Republicans R. A. Brown, Jr. and Clifford W. Gaylord. They were opinionated, strong, determined men in their private businesses and in their positions as commissioners.

Thus, when in September the Commission issued a statement in opposition to dams on Current River, it carried a great deal of weight. When it later refused to oppose three dams on the Meramec River watershed (though it did not endorse them, either) that, too, carried a great deal of weight.[2]

On February 20, 1950, professor Rudolf Bennitt died of a heart attack and the Commission paused to observe: "The Conservation movement in the State of Missouri, the effort of the Conservation Commission, and the building of the conservation program in this state can never adequately put into words the value of the contributions made by him.



Gen. Clifford W. Gaylord was a member of the Commission during the battles over damming Ozark streams. Gaylord died in 1952 after serving only two years of his term.

Without his guidance, enthusiasm, and cordial willingness, the present foundations for the wildlife conservation program in this state could never have been accomplished. We have lost a sincere friend, an outstanding leader and teacher, and an admired co-worker."

Bennitt had guided Syd Stephens in the establishment of the Conservation Commission, and had served as technical advisor to that body in the years following.

In June, 1950, it was noted that Bode's four-year term had expired, and the Commission voted to forego further four-year terms. Hereafter, Bode would serve without definite term, "at the pleasure of the Commission."

Robert A. Brown Jr. was elected chairman of the Commission after Stephens retired and was re-elected for four years. He and Stephens had been chairmen for fourteen years. After

[2] In September, 1975, a later Commission voted to oppose Union Dam on Bourbeuse River on the grounds that it would cause severe, unmitigated losses to wildlife. In 1978, the Conservation Commission came out in opposition to the main dam on Meramec River because of unmitigated wildlife losses and the possible effects on rare and endangered plants and animals that had come to light. Undoubtedly this opposition influenced voters in the Meramec Basin when they voted to halt construction of all dams in the Basin.



A GREAT FEAT OF ENGINEERING

—From The St. Louis Post-Dispatch

The U.S. Army Corps of Engineers abandoned their fourteen-year effort to dam the Current River because, according to their chief, "there was a preponderance of local sentiment against them."



Professor Rudolf Bennitt, who influenced many wildlife biologists and early Department staffers, died of a heart attack on February 20, 1950.

Brown, it was established that no commissioner would succeed himself as chairman. The chair was to be alternated each year between a Democrat and a Republican, on a rotating basis.

Brown's term expired in 1951 and his successor was Joe M. Roberts of Gallatin, newspaper publisher and owner of rural telephone exchanges.

Clifford W. Gaylord died on January 7, 1952, two years and six months into his term. Roscoe B. Clark, another St. Louis businessman, was appointed by Governor Forrest Smith to finish out the term.

Briggs and Pippin's terms expired in 1953 and both were reappointed by Phil Donnelly, who was serving his second term as governor.

When R. B. Clark's term expired in July, 1955, he was replaced by Ben Cash, a Kennett automobile dealer.

In 1950 it became apparent that Congress was going to pass an excise tax on fishing tackle to fund a federal aid to fisheries program, similar to the federal aid to wildlife (Pittman-Robertson) program passed in 1937. Anticipating passage of what came to be known as the Dingell-Johnson Act,[3] Chief Fisheries Biologist Paul G. Barnickol hired some fisheries biologists. Such biologists were in short supply and the Department considered itself lucky to hire a number of them, among whom was Charles A. Purkett Jr., who would rise to head the Fisheries Division and become an assistant director.

A second big waterfowl area was approved in 1950—Duck Creek, next to Mingo National Wildlife Refuge in Bollinger and Stoddard counties. The Commission paid a "high" $45 per acre for much of the Duck Creek area. In 1951, the Department began acquiring land for Swan Lake Public Hunting Area.

In October, 1950, Biologist Allen Brohn, who had gone to work as a deer biologist in 1947, recommended a doe season to meet deer damage problems in Ste. Genevieve County. The Commission listened to the recommendation and approved it in principle. The staff was ordered to start an education campaign to convince the public that shooting does might be good deer management. This started a controversy that threatened even the good will of the Federation. Its board

[3] Public Law 681, the Dingell-Johnson Act, was signed in February, 1951.



Charles A. Purkett was one of the fisheries biologists hired in 1950 in anticipation of passage of the Dingell-Johnson Federal Aid to Fisheries Act.

season was held, Taney County did allow hunting, and when the season was over, most of the opposition faded away. Even Dr. Z. Lee Stokely, *St. Louis Post-Dispatch* outdoor columnist, apologized publicly for his opposition. Wildlife research had vindicated itself.

Department employees, incidentally, were permitted to deer hunt without any restrictions for the first time in 1951.

The Korean War presented a few problems to the Department. Manpower wasn't as short as during World War II but some key men were recalled to service, and new agent replacement wasn't easy. It was decided to drop written and oral examinations of agent candidates until some future general testing.

In February, 1951, Bode again reorganized the Information and Education Division. Apparently dissatisfied with Dr. F. Olin Capps as division chief, he demoted him to chief of the Education Section and replaced him with Gordon H. Smith, who had been publicity director for Missouri Valley College. Smith left the Department in 1955 and Ken-



THE WHITE RIVER LEADER

In the Interest of Lake Taneycomo and the White River Country

VOLUME XL BRANSON, ( ) MISSOURI FRIDAY, OCTOBER 19, 1951 EIGHT PAGES NO. 33

Taney County Protests Opening Doe Season; Land Owners Close 30,000 Acres In Deer Area

A move to include does in some counties in the 1951 deer season caused a near-riot among landowners, newly educated to conservation practices, who could not believe populations warranted an any-deer season.

voted against an "any deer" season.

An "any deer" season was proposed for fifteen counties in 1951, with "bucks only" in seventeen counties. Most violently opposed was Taney County, where landowners threatened to "shut down" the county if the Commission persisted in its folly. Many other organizations and virtually all the outdoor writers in the state felt that the time was not yet ripe for such a liberal season. Many employees of the Department felt the season was a bad idea. But the biologists stuck by their guns, and the Commission backed them. The

neth R. Hicks, who had been chief of the Field Service Section, became Chief of the I and E Division. Ray M. Wells became Field Service chief.

Director Bode had been trying to find a site for construction of a headquarters building to bring the entire staff under one roof. The main headquarters was in the Monroe Building on the corner of Monroe and High Streets. It housed Bode's office, the Fish and Game Division, Fiscal, the Information Section and mail room on two floors. Across High Street, Forestry Division, Field Division



Kenneth Hicks went from chief of Field Service Section to chief of Information and Education Section in Bode's 1951 reorganization plan.

and the Education Section had quarters on two floors of the Herman Building. Down the street the Development Section had quarters over a jewelry store. They later occupied quarters on Monroe Street, in the *News-Tribune* Building. The research staffs for Wildlife and Fisheries were quartered in rented space in Columbia.

The Commission had rejected a building site on Highway 50 west of town, but in December, 1951, approved taking an option on a site on State Street, overlooking the Missouri River. A "group of St. Louisans" wanted to raise some funds for a Department building and Chris J. Muckerman and David F. Crossen sent $1,000 as a start. The State Street property was later sold and is now the site of Dulle Towers senior citizen housing.

In January, 1952, the Commission established a forty-hour work week for personnel in the Central Office. Up to that time, working hours had been 8:30 a.m. to 4:30



Mrs. James A. Reed donated land for the James A. Reed Memorial Wildlife Area in Jackson County in memory of her husband, a senator. Richard Rotsch, Kansas City metro coordinator, is pictured with her at the dedication ceremony.

p.m., with thirty minutes for lunch, plus 8:00 a.m. to noon on Saturdays. The Commission

refused to adopt a policy of retirement at age 65.

In April, 1952, the Commission accepted a gift of land from Mrs. James A. Reed—831 acres valued at $150,000—and agreed to buy additional land up to 3,200 acres as a memorial to the late Senator James A. Reed.

In September, Bode pointed out to the Commission that he would soon be completing his fifteenth year with the Department. He stated that he felt there was danger of getting stale or in a rut. He suggested that they employ Ira N. Gabrielson, president of the Wildlife Management Institute, to conduct a study of the Department and its programs.

Gabrielson reported his findings early in 1953, remarking that Missouri's program was one of the most progressive in the country and that he found little to criticize and much to praise. As follow-up to the Gabrielson study, Bode had the staff prepare an operating plan for the next five years, which was adopted by the Commission.

On November 1, 1952, Bode asked the governor to declare a state of wildlife and forestry emergency as late summer drouth and heat rendered the woods a tinder box. The deer season that had been set for November 6-8 was called off, as were other outdoor activities. General heavy rains abated the threat of fire and the deer season was re-set for December 4-6.

The following year the drought continued, but instead of calling off hunting or fishing



The Department's top brass in 1953 were, left to right, J. Vernon Bennett, Field Division chief; Assistant Director Jay B. Morrow; Melvin O. Steen, Fish and Game Division chief; Gordon Smith, Information and Education Division chief; Montie Glover, Fiscal chief; and George O. White, chief of the Forestry Division.

FORM 19 X16494

STATE OF MISSOURI $1.00

County Resident Hunting and Fishing License

SIGNATURE OF HOLDER

Mr. ..... , County of

of ..... , and State of Missouri,

whose age is ..... years, color of eyes ..... ,

color of hair ..... , is hereby licensed to hunt and fish in said county and adjoining counties until the first day of January after date hereof, subject to the restrictions and regulations of the Game and Fish Laws of Missouri, now existing, or enacted this year.

DATED this ..... day of 1939

..... COUNTY CLERK

By ..... DEPUTY

"HELP PREVENT FOREST FIRES, THEY KILL GAME."

The county resident hunting and fishing license, good in the county of residence and adjacent counties, was finally dropped in 1953.

seasons the Department launched an "Every Sportsman a Fire Fighter" campaign, calling on sportsmen to be careful with fire while afield, and to pitch in to suppress any fires they came across. The program was successful, and despite high fire danger, losses that could be traced to sportsmen were negligible.

Beginning in 1953, the venerable county hunting, fishing and trapping permits were abolished. They had been around since early in the century, but modern transportation had changed sportsmen's recreation habits.

The legislature got wind that the Conservation Department was considering construction of a headquarters building and passed a bill forbidding it to do so. Attorney General John M. Dalton ruled that this bill was clearly illegal.

The legislature created a new State Park Board in 1953, and Bode's connections with that body were severed. The lands that had been bought with hunting and fishing license money, and lands acquired by donation or gift, were divided up between the new Park Board and the Conservation Department.

In January, 1954, Fish and Game Chief Mel Steen proposed some experiments with exotic pheasants. A U. S. Fish and Wildlife Service biologist, Gardiner Bump, was combing the Near East and Orient in search of wildlife that might be introduced into the United States. Steen proposed that Bump secure various strains of pheasants and that studies be made to see if any of them might prosper in Missouri. Ringneck pheasants were present in small numbers in a few Missouri counties, but Steen hoped to find a bird that would hasten the day when pheasants could be a major game bird here.

As a second year of drought tightened



its grip, Steen ordered his biologists to survey the state and report on wildlife conditions. They reported later in the summer that conditions were serious for many mammals and birds, but not grave—yet. Streams were at an all-time low and fishing conditions were bad. Fortunately, not long after the report was made, rainfall picked up and conditions eased.

A foundation set up to honor the late commissioner Clifford W. Gaylord made available to the Department, through Ducks Unlimited, a gift of $35,000 for construction of a wildlife laboratory at Duck Creek Wildlife Area. It was named the Gaylord Laboratory, and Ducks Unlimited donated an additional $15,000 the following year.

Bode's administrative assistant, Bettye Hornbuckle, announced her resignation in

The Department experimented with exotic species like this Reeves pheasant, left, held by biologist Ken Sadler. Bettye Hornbuckle (Gibson), below with commissioners and Bode, announced her retirement in 1954. She played an important role as diplomat and protector during Bode's sometimes stormy tenure as director.



September. She had joined the old Fish and Game Department in August, 1933, and been retained when the Conservation Commission came into being so she had twenty-one years of service. She functioned as secretary to the Conservation Commission, as well as administrative assistant to Bode. She protected Bode from many contacts and she wielded considerable power among Department employees. She was widely respected for her smoothness in dealing with people and problems, and the Commission expressed its regret at her leaving with a resolution honoring her years of able service. She was replaced by Helen A. Cooper, whom she had selected as her successor.

The Charles W. Green Experimental Wildlife Area near Ashland was begun in 1955, with a gift of forty acres of land from Lue C. Lozier, Jefferson City attorney.



The coturnix quail experiment was an attempt to find a bird that could survive where bobwhite quail could not. Thousands were released, but none survived. Here, Howard Wight, wildlife biologist, releases coturnix in good quail cover.

In November of that year Mel Steen launched another of his experiments to find a game bird adapted to Missouri's conditions. This time it was an experiment to introduce coturnix quail.

On January 3, 1956, Jay B. Morrow died of a heart attack and Bode lost an assistant director and close friend. Morrow was forty-six years old at the time and had been with the Department for sixteen years. He began as a Field Service agent in 1940, and rose to become Field Service chief, chief of the Field Division, and assistant director in 1949. In that post he had taken over a lot of Bode's public contact work and excelled in dealing with people.

There had been considerable rivalry between Morrow and Melvin Steen as both jockeyed to position themselves to become Bode's successor. But as it turned out, neither was destined to become director in Missouri.

William E. Towell, an assistant state forester, was chosen in April to become "assistant to the director" and two months later Mel Steen announced his resignation. He had accepted the director's post with the Nebraska Game and Parks Commission.

Osal B. Capps, district forester at Rolla, was promoted to Towell's post as forest fire control chief. Charles A. "Ted" Shanks was sent to the Hudson Bay area to band geese—the first Missouri biologist to do so.

As the summer wore on, the Commission okayed a plan to remove rough fish from Lake Wappapello as an experiment to improve angling there. It turned down a request to air condition the headquarters offices. Then in September, Bode announced his intention to resign at the end of the year.

He had turned sixty-five in February, and the pressures of the job over so many years, the loss of Bettye Hornbuckle and now Jay Morrow were apparently too much. The old warrior was tired and wanted to rest.[4]

He had come to Missouri in November, 1937, and organized the new Department, taking it to national prominence. A news item said of him, "Conservation authorities throughout the nation have praised and envied Bode for the organization that, under his direction, rapidly rose to a top spot in the conservation picture. Almost universal respect was accorded him even by those opposed to some of his policies.



Ted Shanks was the first biologist sent to Canada to band geese for population research. He went on to head the Game Section in 1955.

"Bode's chief contribution to wildlife management in Missouri was his insistence that wildlife's future was inextricably bound up with agricultural practices. He insisted not only that management must be based upon sound biological facts, but must also recognize that game is mainly raised on private

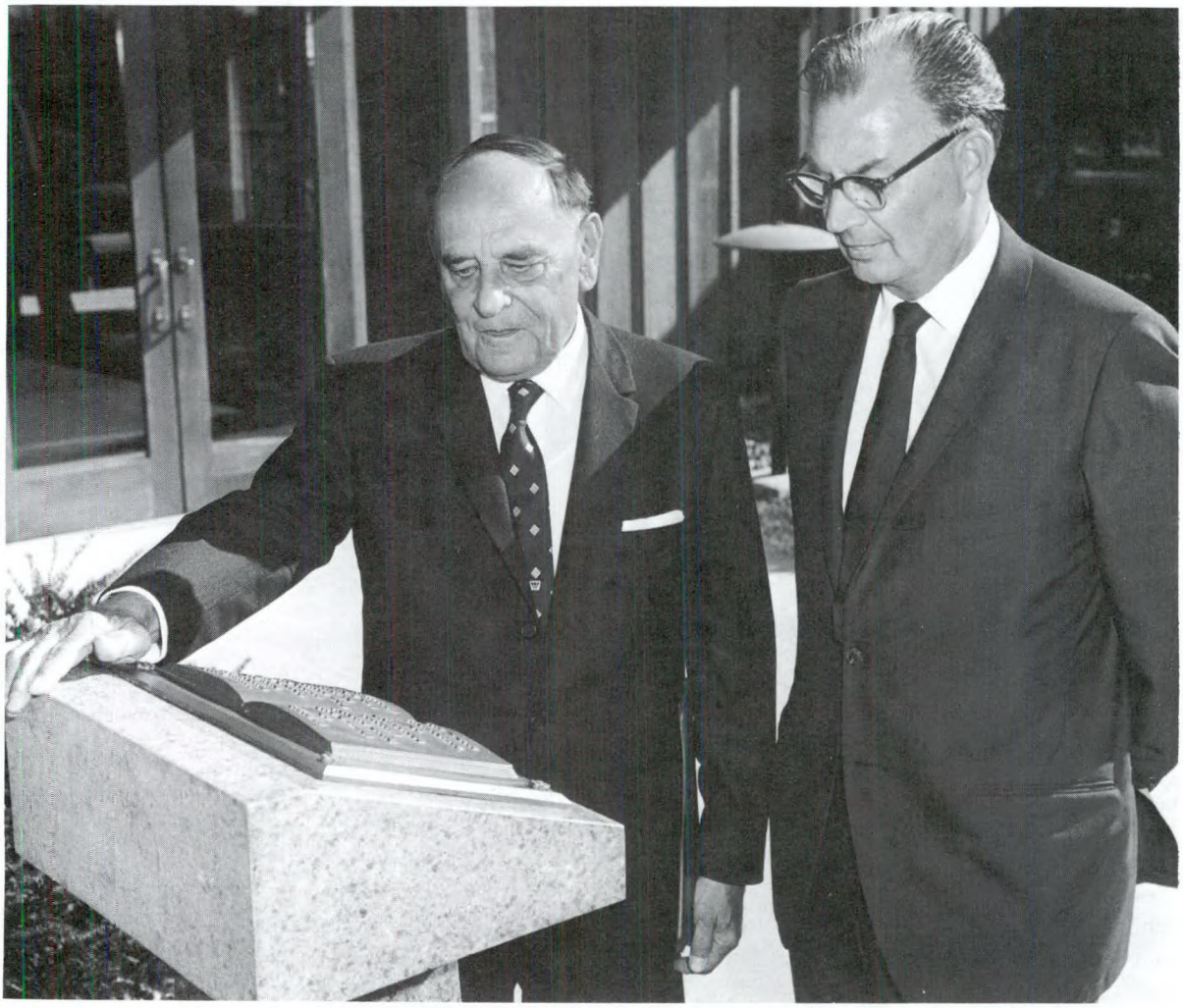
[4] There are indications that Bode had become increasingly at odds with the Commission, which consisted at this time of Joe M. Roberts, chairman, Frank P. Briggs, Dru L. Pippin and Ben Cash. It was felt that he had served long enough and that newer, younger hands should seize the tiller. It was suggested that he retire or resign and Bode became extremely angry at the suggestion, though he ultimately did tender his resignation.

lands and management plans must enlist agricultural support to be effective."

In November, the Commission appointed William E. Towell acting director. Irwin T. Bode served until December 1 and then bade his staff farewell.

Despite his aloof manner, Bode was loved and respected by that staff. In September, 1968, he returned at the invitation of the Commission to attend the dedication of a marble lectern erected on the Department grounds. It had been designed and built with funds contributed by his former employees. A bronze plate on that lectern reads:

"In honor of Irwin T. Bode, first director Missouri Department of Conservation, 1937–1957, whose wisdom and firm but gentle hand guided this new Department to success and national acclaim."



In 1965 Department employees honored Bode with a plaque and marble lectern located near the front entrance of the headquarters building. With Bode at the dedication of the plaque is Director Noren.

The Towell Years

Shortly after I. T. Bode submitted his resignation as director, the Conservation Commission offered the post to Thomas Kimball, director of the Colorado Division of Wildlife. Kimball had an excellent record as a wildlife administrator from his former position as director of the Arizona department before assuming his post in Colorado in 1952. He was interested in the Commission's offer because of the reputation Missouri had established under Bode. Its constitutional base and relative freedom from partisan politics were attractive to Kimball. And Bode had established an environment where there was stability for a professional to administer a good wildlife program.

Kimball came to Missouri to look over the situation, bringing his wife and a son. After visiting the state, he reluctantly declined to accept the directorship. The son, who suffered from an asthmatic condition, became ill while they were in Jefferson City and a physician told Kimball that he thought the Missouri Valley might be an unhealthy place for the boy. Another reason was that Kimball was a devout Mormon and the Jefferson City area had few who followed that faith. Kimball wanted to rear his six children in a religious atmosphere and he felt that was unlikely for a Mormon in the mid-Missouri area.

Kimball returned to Colorado, leaving there in 1960 to become executive director of the National Wildlife Federation, a post he held for twenty-one years.

After Thomas Kimball's refusal, the Commission advertised nationally for applicants for the director's job. It received a great many applications and interviewed eleven men, none of whom was selected.[1] Instead, they finally settled on William E. Towell, who had been serving as acting director.



William E. Towell became the Department's second director in 1957. A native of St. James, Towell's achievements included streamlining the Department's administration and locating all sections and divisions under one roof for the first time.

Towell was born and raised in St. James, Missouri, attended Drury College in Springfield and the University of Missouri, then took both his bachelor's and master's degrees in forestry from the University of Michigan in 1938. That year the Department was setting up its forestry program and Towell applied

[1] Those interviewed were: Gen. W. M. Hoge, Lexington; A. B. (Bud) Jackson, Springfield; Earl I. Long, Wappapello; August P. Beilmann, Gray Summit; Hugh Denney (former wildlife biologist), Ellington; Charles Callison (former information officer), Washington, D. C.; Harold V. Terrill, (first wildlife biologist hired by the Department), Jefferson City; John S. Stevens, St. Louis; Curtis S. Allin, Melrose, MA.; James R. Loeffler, Picayune, MS.; and John Clark, Montrose, CO.

for the post of state forester. He was interviewed by Commissioner A. P. Greensfelder, who thought Towell was much too young and inexperienced. But when George O. White became state forester, Towell was one of the first four foresters he hired, assigning him to the Meramec Forest Fire Protection District at Sullivan.

When the federal Norris-Doxey Act helped fund farm forestry positions in 1941, Towell became the second Department farm forester, assigned to Kirksville. He held that post for nine months, then was brought into Jefferson City by White to help with administration as a "senior forester."

In that position he also wrote and published manuals for farm foresters and fire district operations. During World War II he and fellow forester Arthur B. Meyer served as photo-interpreters in Naval Intelligence. After the war Towell and Meyer were promoted to assistant state foresters, with Towell assigned to forest fire protection and nursery operations.

When Jay B. Morrow died in 1956, Towell was selected by Bode as "assistant to the director." One of his major roles was chairman of the regulations committee and it was in that capacity that Towell felt most keenly his lack of background in wildlife management.

He studied everything he could about wildlife and consulted the Fish and Game Division staff. He got along well with Fish and Game Division Chief Melvin O. Steen, before Steen left to become director of the Nebraska Game, Fish and Parks Department. Towell said he practically memorized Durward Allen's book on wildlife, *Our Wildlife Legacy*, and later made it required reading for new employees.

Towell had been assistant to the director about six months before Bode retired, and served as acting director another six months. He had not considered himself a candidate for Bode's job at first, but as matters dragged on and he received some encouragement from Commissioner Ben Cash, he presented to the Commission a thirty-six-point program that he felt might help the Department and offered himself as a candidate.

After Kimball declined to accept the job, there was some dissension within the Commission. It consulted Ira Gabrielson of the Wildlife Management Institute, who advised selecting a director from within the staff. Mel Steen offered to return from Nebraska to take the post and initially he was supported by Joe M. Roberts and Ben Cash. Later, Joe Roberts championed Information Officer Dan Saults for the job, possibly feeling some kinship because of the newspaper publishing background of both men. When Towell presented his program, the Commission accepted it, but Roberts insisted that Dan Saults be promoted to assistant director. Towell became director and Saults assistant director on May 1, 1957.



Dan Saults, left, and Towell in 1957 when Saults was serving as assistant director under Towell. Saults became well known for his eloquent editorials in the Conservationist, *before leaving the Department to work with BLM in Washington, D.C.*

In a salute (and perhaps a slap at Bode), the House of Representatives passed a resolution hailing their appointments as "natives of Missouri." That harked back to the troubles

Bode had in 1937, as a non-native of the state.

Towell and Saults made a good team. Towell brought a good sense of organization to his job out of his background in the Forestry Division. George O. White had been a good administrator, modeling his program on that of the U. S. Forest Service. A lot of emphasis was placed not only on doing a good job, but also on appearance. Forestry headquarters were models of neatness and field personnel wore uniforms.

One of Towell's ambitions was to get all Department field men into uniforms, particularly the conservation agents. The old olive drab and dark blue agent's uniform never was popular and men seldom wore it unless specifically ordered to do so on special occasions. It took several years of experimentation with various types of uniforms before one was found that met the needs of the agents and was generally acceptable to them. However, there was a lot of resistance to wearing any uniform at all, initially.

Other employees felt the subtle pressure of appearances, too, (Towell was a natty dresser) and it wasn't long before employees began wearing ties and jackets to work in the Central Office. In the old un-airconditioned Monroe Building dress had been quite casual.

Towell initiated weekly staff conferences so that each unit could be kept aware of what other units were doing, and problems could be discussed and solutions mutually sought.

Both Towell and Saults had a strong belief in public relations, and getting conservation agents into marked cars and uniforms was part of their program. Both believed it was more important for wildlife violations to be prevented, by making agents highly visible, than the number of arrests they might make. They accomplished uniforming agents, but marked cars came later.

Another goal of Towell's was to improve the status of the conservation agent, by upgrading the requirements and lengthening the training period. Over the years this was accomplished. Central Missouri State University led other universities in offering college credit for agent's training.



Agent Thomas Wright models the first conservation agent uniform. Impractical for field work, it hung in the closet more than it was worn.

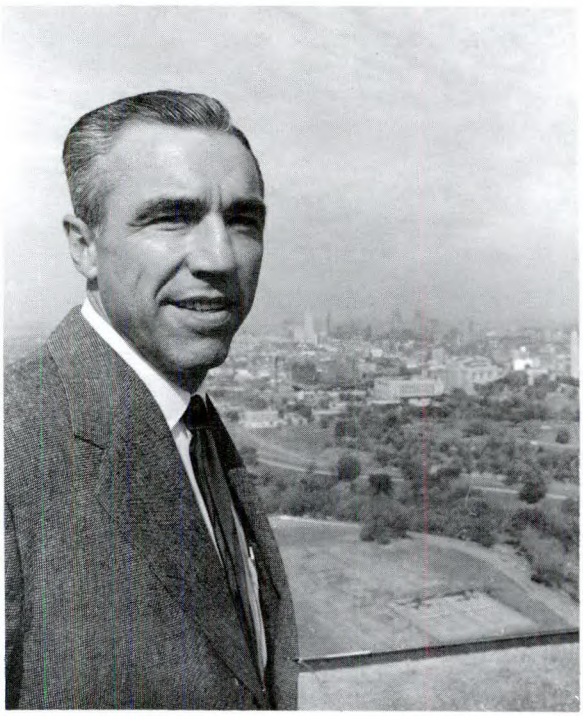
In 1957, Dan Saults recommended to Towell that Department offices in the metropolitan areas of St. Louis and Kansas City would be a service to the public in those areas, and sub-offices were approved in Oc-

tober. Two Field Service agents, Herbert S. Schwartz in St. Louis and Richard H. Rotsch in Kansas City, were assigned to manage them. The officers served as information sources for the media and public, and also handled permit sales.

Saults was especially good as chairman of the regulations committee. Working with Werner O. Nagel, he sought to simplify the *Wildlife Code*, to make regulations simpler and easier to understand. He enunciated the committee's philosophy as "to approach regulations with this in mind: that we should permit as much public use of wildlife resources as is consistent with the state of such resources, by species; that we should avoid harassment of the hunter and fisherman wherever possible; that (to paraphrase Jefferson) that regulation is best which regulates least. In essence, we feel it is best to keep seasons as long as possible, and to be first restrictive on methods, next on limits and to approach shortened seasons as a last resort. This is in line with our policy that 'the pursuit is more important than the take.'"

It was in the area of regulations that Towell first began to have difficulties with the Conservation Federation which eventually led to a serious break between the two organizations. According to Towell, Jay Morrow had always consulted first with the Federation on regulations changes. Towell believed that the Federation, during Bode's tenure, had been too closely tied in with regulations and administration. He felt that was not in the best interests of the Department and was determined to assert its independence from what he considered undue Federation domination. There were a number of years when the Federation officers and the Department were at odds, though this eventually was overcome.

It was Commissioner Ted Butler who first voiced the growing rift between the Department and the Federation. He had been president of the Federation when he was appointed by Gov. James T. Blair to replace Joe M. Roberts, effective February, 1958. Roberts' term had expired in July, 1957, but the Governor had not named a replacement and Roberts continued to serve an additional six





Metro service coordinators Richard Rotsch, left, Kansas City and Herbert Schwartz, right, St. Louis, both assumed their duties in the new metro offices in 1966 after serving as conservation agents and Field Service agents.



Ted Butler was president of the Conservation Federation when he was appointed commissioner in 1958. He was concerned at the rift at that time between the Federation and the Commission.

months.

Butler resigned his position as Federation president so as to avoid any conflict of interest, but he retained close ties with the group. He had been affiliated with the Federation since its founding, having stumped the state to secure passage of Amendment 4, and having served as its first full-time executive secretary for six years.

At the August, 1961 meeting, Butler told the Commission that the Conservation Federation was dissatisfied with both the Department and Commission and suggested inviting the Federation officers to a September conference to discuss matters. The Federation officers could not attend a meeting at that time. There was a temporary impasse between the two groups—the Federation wanted a meeting without the presence of Towell, Saults or its own director, Ed Stegner, and the Commission wanted all parties present.

A meeting was eventually held on February 25, 1962, at the Governor Hotel in Jefferson City. Towell, Saults and Stegner were not present. Besides the Commission and its secretary, Helen Cooper, the Federation was represented by its president, Dale Bevard, and six others.[2]

The meeting was cordial, with both sides presenting their views. The Federation indicated that under the present Department administration it was not being given the consideration that had existed under the previous administration. The Commission indicated that it was concerned about appearing to be "dictated to" by the Federation. Both groups finally concluded that the root of the problem probably was personal friction between Towell and Stegner, rather than any real differences between the Federation and the Commission. Director Towell was instructed to keep the Federation posted on Commission matters and to work as closely as possible with the organization. The March issue of the *Conservationist* carried an article on the Federation as the Commission's "strong right arm."

That seemed to settle matters for a brief time, broken only by a flare-up in July. That month the Department had published a special edition of the *Conservationist* celebrating the twenty-fifth anniversary of the Department and dealing with its history. Robert A. Brown, former commissioner and long-time board chairman of the Federation, wrote a highly critical letter because the Federation was not more highly publicized in that magazine.

Brown wrote, "I thought the meeting [Feb. 25th] was productive and that some very fine results would follow. It seems to me that it comes with very poor grace for the Commission in effect to slap its staunchest supporter in the face, particularly when we all were trying to establish better relations on both sides."

The Commission was much upset by Brown's letter, "bitterly opposed" to it, as Chairman Ben Cash put it. Director Bill Towell was more conciliatory in his reply to Brown, stating that the Silver Anniversary issue was intended as a chronology of the Conservation Commission, not a history of the con-

[2] Included were Vice-President Roland M. Hoerr, Carl Morrow, David Crossen, John I. Rollings, Ted Scott and Federation secretary, Virginia Snodgrass.

servation movement. No slight was intended, and "it is my hope that this incident will not be magnified further beyond its real importance." That seemed to cool matters, at least between the Commission and the Federation.

There was a later flare-up between Stegner and the Commission in the 1960s over Corps of Engineers policies with respect to acquiring lands for construction of Truman Dam. The Federation took a hard-line position that the Corps should take title to all lands, while the Commission was more flexible and at least partially supported the Corps policy of acquiring title to certain lands but flood easements on other lands. That is an oversimplification of an extremely complicated situation, but the matter caused hard feelings on both sides when it was being considered. The passage of time eventually settled that issue.

One of Towell's goals outlined to the Commission was to unite the Department. There were inequities in the salary structure and decision-making was splintered. This was aggravated by the staff being located in three different buildings in downtown Jefferson City, and the research group being located in two different offices in Columbia. Towell felt that the research staff would be more valuable if located in Jefferson City, but was opposed in this by many of the staff. He gave up trying to move them from Columbia, where they had available researchers and libraries of the University to help in their work. Instead, he began to concentrate on getting the Jefferson City staff under one roof.

In May, 1958, he succeeded in getting the Commission to assent to a two-year lease for offices in the much more modern Farm Bureau Building, then located on Missouri Boulevard. It was a three-story office building and the entire Department moved into the second floor in July. In January, 1962, the Commission rented additional space on the first floor. The Department remained in the Farm Bureau Building until August, 1965.

The Department had been turned down for office space in the Jefferson Building when it was built in the early 1950s. The Department's property on State Street in Jefferson

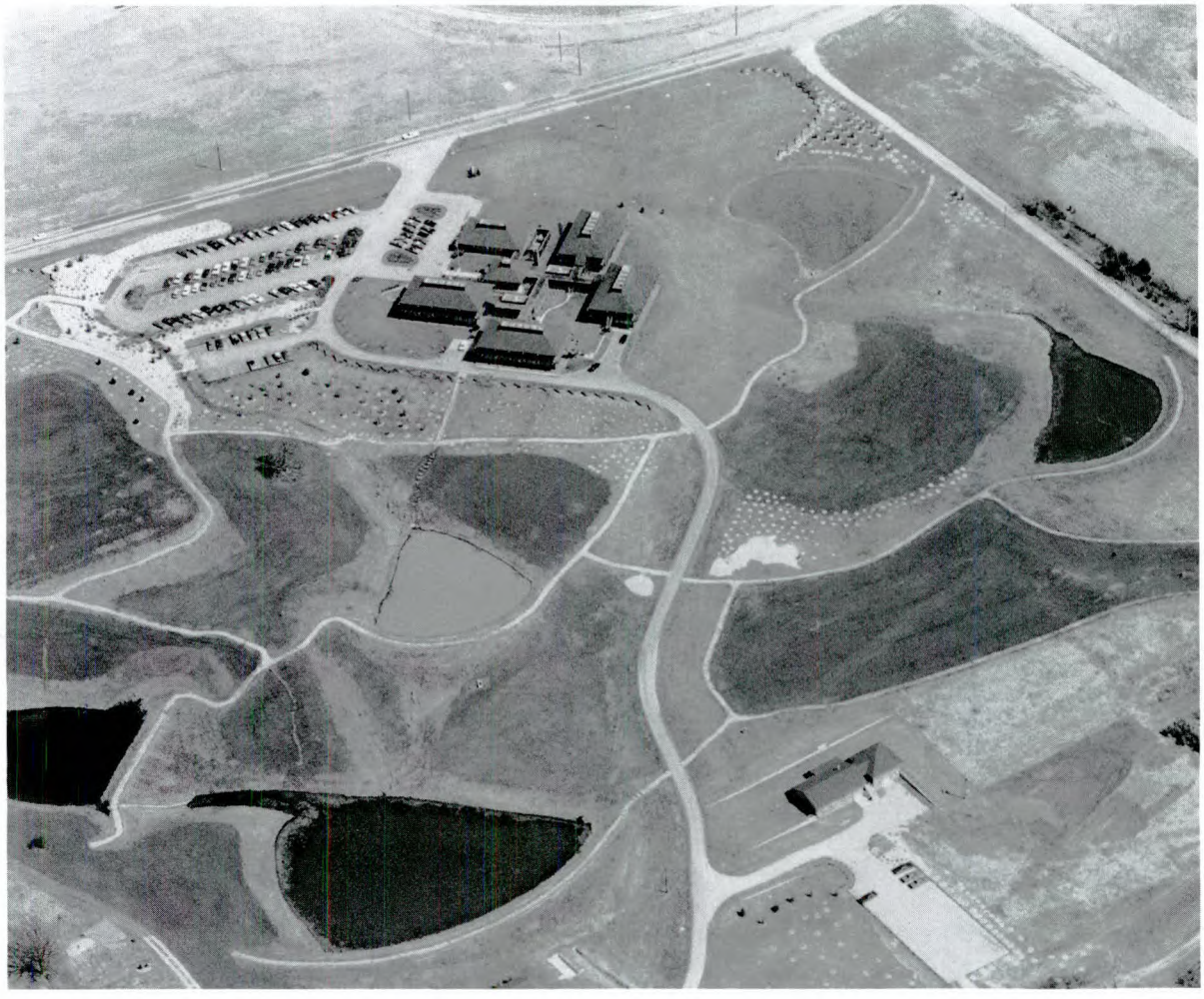


The former Farm Bureau Building was the first home-away-from-home for the Department, which occupied the second floor and part of the first floor for seven years before moving into headquarters on North Ten Mile Drive (Truman Blvd.) in August, 1965.

City became obsolete as a possible building site and was finally sold in February, 1961. Towell then tried to get a building site west of the Capitol on state-owned property, but was turned down by the legislature. In July, 1961, the Commission assented to acquiring forty-two acres on North Ten Mile Drive (now Truman Boulevard) as a future headquarters site, with the proviso that half of it be offered to the Highway Commission. That body also was seeking a new building site, but declined the Commission's offer.

The Commission was split on beginning construction of a headquarters building on the North Ten Mile site, with Pippin and Burch urging construction and Cash and Butler opposed. The Federation, too, opposed construction, saying that the legislature had been opposed to it and there was no point in needlessly arousing its ire. Governor John Dalton supported the construction, though various members of the legislature opposed it.

It wasn't until June, 1963, that the Commission finally accepted a budget for the next fiscal year that included funding for building construction. The next month a contract was signed with the St. Louis architectural firm of Hellmuth, Obata and Kassebaum for building design. Reserve funds that had been



The headquarters complex as it appeared in 1968 included the original five modules, training building, shop and garage.



Governor Warren Hearnes addresses the crowd at the dedication of the new Department headquarters October 1, 1965. Three different construction efforts added a training building in 1968, a 26,000-square-foot addition in 1980, and more storage buildings and a shop in 1985.

squirreled away were to be used for construction, with an additional $750,000 from federal accelerated public works funds.

The six-building complex was completed and the Department moved into it in August, 1965. One of Towell's major objectives had been met: the Department, with the exception of the research staff, was "under one roof." The official dedication and open house was held October 1, 1965, and even former Director I. T. Bode came to take part in the festivities.

A training building was constructed in 1968. A growing Department rather quickly needed more space and another office building was completed in 1971. The Department had a chance to add to its holdings in later years and bought two adjacent parcels that increased the headquarters site to about 160 acres.

In 1980, a 26,000 square foot addition was completed, with erection of yet another two-story office building plus semi-underground offices, as an energy saving technique. Additional shops and storage buildings were completed in 1985.

Paul Q. Tulenko, a trained landscape architect, designed the grounds and plantings. Most of the area, which had been a pasture when purchased, was planted to native Missouri trees and shrubs. Five small ponds, each demonstrating different water control structures, were constructed. Garden clubs and individuals took an interest in the plantings and donated some of them. The office complex and grounds quickly became a showplace for Jefferson City and nature trails and guided tours were offered.

It is believed that this site was the location of a pheasant game farm near the turn of the century, under the old Fish and Game Department.

Towell embarked on a series of moves to correct administrative problems with some reorganization of the Department. Because of inconsistencies in salaries, training and recruitment, he created a Personnel Section to oversee these functions. Ray M. Wells, who had begun his career with the Department as a conservation agent in 1944, was promoted to a post of personnel officer, July 1, 1958. Wells had been a Field Service agent from

1946 to 1955, when he became chief of the Field Service Section.

At the same time, Towell abolished the Information and Education Division, assigning its division chief, Kenneth R. Hicks, to chief of the Field Service Section and assigning the Education Section to the Field Division, which also contained the Field Service and Protection sections. The Information Section, headed by James F. Keefe since the previous August, was assigned to the director's staff.

In the Fish and Game Division, Charles R. "Ted" Shanks was named superintendent of game, replacing Paul Q. Tulenko, who became federal aid coordinator.

Tulenko first joined the Department in 1940 as a draftsman in the Federal Aid Section. He rose to become state project leader in 1943, and Game chief in 1946. Ted Shanks had been a wildlife biologist specializing in waterfowl management since 1947.

In January, 1964, Towell needed someone to work with the U. S. Bureau of Outdoor Recreation in developing a state outdoor recreation plan. He chose Edwin H. Glaser, transferred from his Forestry Division post. Glaser had been with the Forestry Division since 1950, but left for two years to teach forestry at Mississippi State University. He returned in 1956 as a farm forester and was transferred to the Central Office in 1959 in charge of fire control, and later supervised state forests and nurseries.

In 1964, following the resignation of Dan Saults as assistant director,[3] Towell undertook another sweeping change in Department organization. He created two assistant director posts, with Larry R. Gale promoted to assistant director-line, and P. G. Barnickol, assistant director-staff.

Paul G. Barnickol had joined the Department as an aquatic biologist in 1939. He left for a time, then rejoined and became chief research biologist in 1948, and superintendent

[3] Saults, after serving as assistant director for almost seven years and almost exactly seventeen years after he joined the Department, resigned to accept a position with the Bureau of Land Management in Washington, D. C. He later held a similar post with the U. S. Fish and Wildlife Service. He retired to the Branson area in 1973, where he did free-lance writing and served in many volunteer conservation posts until his death September 23, 1985.



Future Farmers of America who accomplish conservation projects are annually treated to a tour by the St. Louis United Sportsmen's League. Accompanying this group from the mid-1960s were Field Service agents Kenneth Hicks, extreme left; J. Lewis Berry, third from left; Otis Thorburn, fourth from left; and Leonard Rowe, extreme right.



Director William Towell with assistant directors Paul G. Barnickol and Larry R. Gale in a 1965 photograph taken shortly after the Department moved into its new headquarters.

of fisheries in 1959. He replaced Dr. George B. Herndon, who retired after twenty-six years as fisheries chief, dating back to the old Fish and Game Department in 1933. Gale, of course, had been chief of the Fish and Game Division since 1957.

The Fish and Game Division was split into a Game Division, headed by Ted Shanks, and a Fisheries Division, headed by Charles A. Purkett Jr., who replaced Barnickol. "Chuck" Purkett, a native of Montana, had first come to the Department as a fisheries biologist in 1950, one of those hired in anticipation of passage of the Dingell-Johnson Act. He won international attention as the first biologist to unravel the riddle of paddlefish reproduction, and became assistant superintendent of fisheries in 1962.

In a move to further increase efficiency, Towell created an Operations Section from the construction and maintenance force headed by Robert F. Wells in the Forestry Division. This section, plus the Engineering Section, which was detached from the old Fish and Game Division, was assigned to Assistant Director-Staff Barnickol, along with the Information, Federal Aid, Personnel, Fiscal and Planning sections.

The Planning Section, composed of Ed Glaser and Carl R. Noren, was a new one. It combined the liaison functions of both men. Noren was continuing work he had done



Biologist Charles A. Purkett unraveled the mystery of paddlefish spawning and enabled the Department to maintain a fishery after Truman Dam cut off access to spawning grounds in the Osage River.

since May, 1948, when Director I. T. Bode had assigned him to keep an eye on river basin developments and to do liaison work between the Department and various federal agencies, principally the U. S. Corps of Engineers. The new two-man unit was headed by Glaser.

Larry R. Gale, as assistant director-line, supervised the Field Activities Division, now composed of the Education Section, Field Service Section and Protection Section; and the Game, Fisheries and Forestry divisions.

Another of Towell's goals had been to mend relations with the governor and legislature. Bode had shunned both insofar as he could, and the result had been suspicion and mistrust on all sides. Towell recognized that there were times when the Department needed the support of both the governor and the legislature and set about establishing a friendlier basis, without ceding any of the Commission's constitutional integrity.

He ordered the governor's name to be placed on the masthead of the Department's monthly magazine, as a courtesy. This immediately drew a scathing rebuke from former Director I. T. Bode, in retirement in California, claiming Towell was "knuckling under to the politicians." Nevertheless, Towell began to do some lobbying with the governor's office and the legislature in an attempt to acquaint both with the needs and aspirations of the Department.

Relations were fairly good with Governor James T. Blair, even more so with Governor John M. Dalton. Governor Warren E. Hearnes, according to Towell, never did philosophically accept the Conservation Commission's autonomy and was more difficult to deal with.



Carl Noren was assigned by I. T. Bode to monitor river basin development. Under Towell, he assisted Ed Glaser in the newly created Planning Section.

Hearnes made several attempts to exert control over the Commission that drew strong opposition, and these incidents did not endear either the Commission or Towell, personally, to Hearnes.[4]

Relations with the legislature during the period blew hot and cold. There were some legislators friendly to conservation, and as a group the legislature turned back every attempt to intrude into the Commission's autonomy. Not that there were not some stormy sessions, when various bills to do away with the Commission or reduce its powers were introduced. Usually, the watchdog of the Conservation Federation of Missouri, Executive Director Ed Stegner, would lobby against the bills and summon letters and personal calls from Federation members. These were enough to turn back such legislation.

One major problem with the legislature arose in 1966, when that body attached a proviso on the Commission budget that forbade the Commission to give any salary increases. The comptroller refused to honor salary raises the Commission authorized on the grounds that it was contrary to legislative intent. This was immediately appealed to the attorney general for a ruling. It was one which he apparently was loath to make because it wasn't until the following December that he issued a ruling. The attorney general ruled that the Conservation Commission was not directly under the control of the governor and thus the comptroller did not have the authority to disapprove requests for expenditures by such departments not directly under the governor's control, except when the expenditure is not within the purpose of the appropriation or when there are not sufficient funds in the appropriation to pay for such expenditure.

Towell also had problems with the State Park Board, again due to personality conflicts. Parks Director Joseph Jaeger Jr. had worked under Towell as a forester and there had been differences between the two men before Jaeger left the Conservation Department to accept the Parks post.[5] Time and again small differences between the two agencies would erupt into full-blown problems. Conditions improved somewhat between the two agencies when Lee C. Fine became Parks director, and Towell always regretted that the two agencies did not get along better during his administration.

One last major aim of Towell's was to embark on a public lands acquisition program. George O. White had been strong on public lands acquisition, dating from his experience with the U. S. Forest Service. Bode generally opposed the Department owning land. As an example, what was known as the 6,000-acre Adair Tract (now Huzzah Wildlife Area) had come on the market for $10,000 and White had urged Bode to buy it. Bode refused. The Department later bought the tract from Col. Joseph Plassmeyer at a price of $42,000, which was considered a bargain at the time.

White had quietly gone about picking up forest lands at tax sale prices and built a modest state forest system between the national forest's holdings. He was helped in this by Robert Brown, a realtor in Rolla. Brown would pick up tax sale lands and sell them to the Department for fifty-cents to a dollar an acre. Towell believed that money invested in recreational lands was an investment in the future. The later *Design for Conservation* echoed this in 1971, with its goal of 300,000 acres of additional public recreation land.

Towell hoped for a Department fishing lake in every county and public hunting areas scattered throughout the state. He launched the stream access program, begun in July, 1958, with a donation from Ross E. Stones of St. Louis of two and one-half acres on the Big Piney River. A number of land purchases were made under Towell's administration, but it remained for a later director to actually carry out a large-scale acquisition program.

Other major events took place during Towell's tenure as director. An intensive trout fishery was begun at the James Foundation's

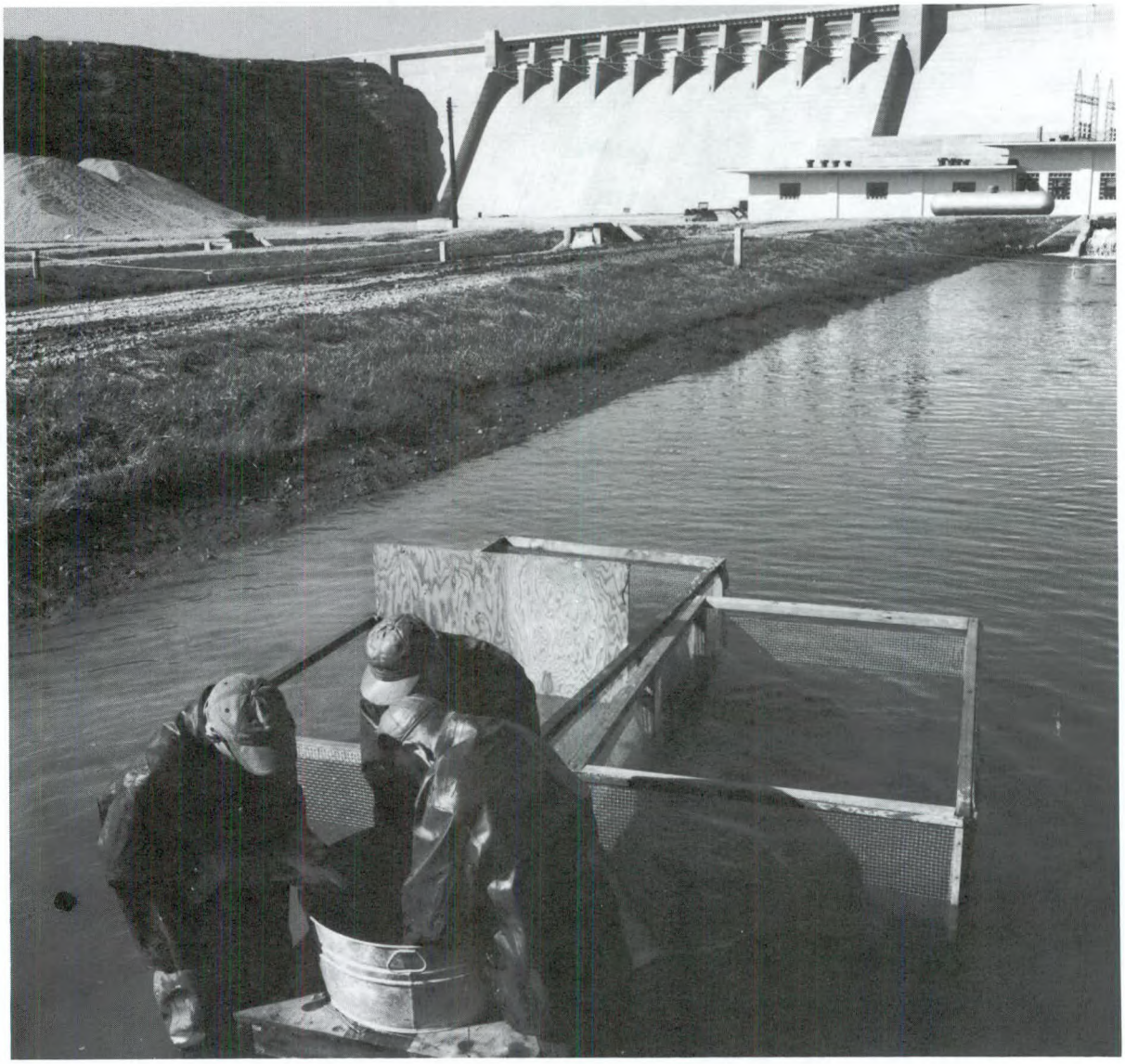
[4] It was claimed that Towell had publicly allied himself with Hilary Bush in the 1963 campaign for the Democratic nomination for governor, and Hearnes never forgot that. A newspaper published a picture of Towell and Bush hunting at Swan Lake.

[5] Towell claimed Jaeger was angered when Towell opposed him for fire control chief, and Osal B. Capps was selected instead.

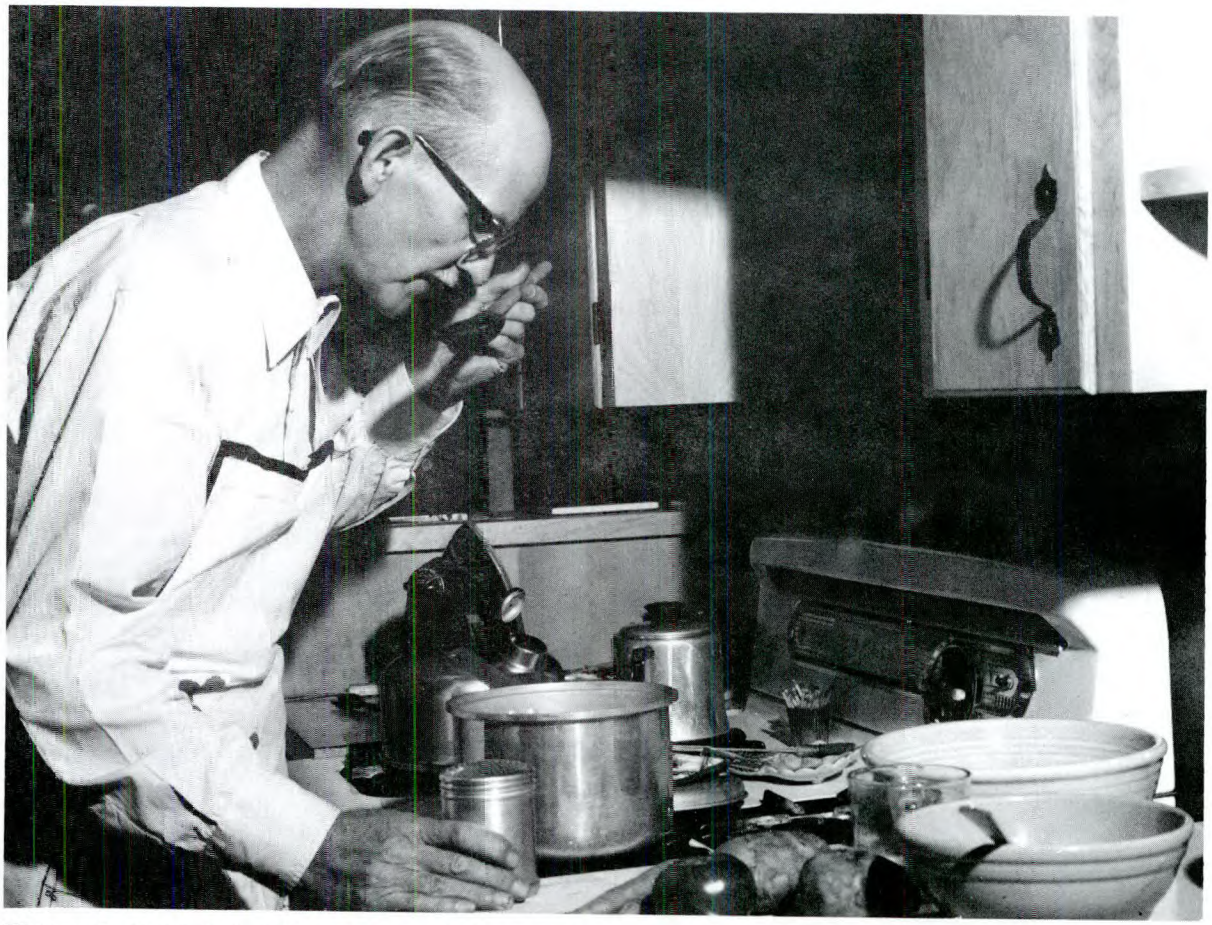
Maramec Spring in 1957. The employees came under the State Retirement System, to the relief of Conservation Agent L. N. Elson (71), Supervisor Joe Green (73), Attorney Lon Haymes (70) and Janitor Josh LaRue (75).

The federal Uniform Pleasure Boating Act brought regulation to that activity in 1958, and it was assumed the Commission would be the administrator. But the same constitutional provisions that insulate the Commission from political manipulation prevented it from taking on boating regulation, and the Division of Water Safety was created. Many believe that the Department of Conservation should have been charged with this.

In 1959 the new Shepherd of the Hills Hatchery began operations. That same year the first statewide deer season was held, marking the beginning of a new era. In De-



Fisheries personnel check on the spawning condition of trout below Table Rock Dam in 1959, the year Shepherd of the Hills Hatchery went into operation.



Werner O. Nagel began his career with the Department as a biologist in charge of quail and partridge stocking programs. He kindled many conservation fires in the Department and throughout the state. He co-authored the first Missouri game survey, and wrote Conservation Contrasts *and the best-selling* Cy Littlebee's Guide to Cooking Fish and Game.

cember, a joint publishing venture with the University of Missouri Press brought out *The Wild Mammals of Missouri* by Charles and Elizabeth Schwartz. At the same time the Department's all-time best seller, *Cy Littlebee's Guide to Cooking Fish and Game* by Werner O. Nagel was introduced.

In 1959, a proposed Ozark National Scenic Riverways to preserve the Current and Jacks Fork rivers occupied the Commission's attention. It wrote Senator Thomas F. Eagleton that it supported the Riverways concept in *principle* and would cooperate in its establishment, requesting that forestry practices, hunting and fishing be made a part of it. The ONSR came into being when President Lyndon Johnson signed Public Law 88-492 in August, 1964, but land acquisition did not begin until 1966.

In 1960 Missouri's first hunting season on wild turkeys in modern times heralded the comeback of that king of game birds. A late winter snow storm reduced small game numbers to the lowest ever recorded, and there was a considerable die-off of pond fish.[6] Emergency feeding programs were established and set the pattern for future years. A three-day archery deer season was held in Knob Noster State Park, the first such ever conducted. In 1961, for the first time a hunter could take two deer in a single year, one by gun and one by archery methods.

[6] At Jefferson City, forty-four inches of snow fell between February 20 and March 20, 1960.

In 1962, two new Protection regions were formed: North Central and Central, bringing the total to nine regions. The Department celebrated its twenty-fifth anniversary in July, 1962, with a special observance for all former commissioners and employees at the State Fair. In that year all hawks—even the Cooper's and sharp-shinned—were brought under protection, and the bobcat was protected by being placed on the sport list.

In 1963, drought conditions caused concern about hunting activities adding to forest fire worries and the Commission dusted off the old "Every Sportsman a Fire Fighter" campaign once more.

In 1964, the Commission okayed selling an easement on Schell-Osage Wildlife Area to the Department of Defense for a missile site. Director Towell proposed differentiating between the Department and the Commission by creating a "Department of Conservation" to indicate the staff. But legal blocks prevented this and it wasn't until reorganization of state government in 1974 that this came about.[7]

In 1965 the first ten-shell limit was im-



Swan Lake Area Manager Fred "Brownie" Veach draws a numbered ball that will tell the hunter which goose pit he will hunt from. This was an early morning ritual at all Department waterfowl hunting areas.

[7] The attorney general ruled that because Gov. Donnelly had put the Conservation Commission, State Park Board and the Moses Austin Memorial Commission into a State Department of Conservation in June, 1946, the Conservation Commission was legally a part of that department and could not create its own.

posed at Swan Lake Public Hunting Area in an attempt to stop "sky busting." In 1966 the Department took over management of Thomas Hill Lake and adjacent lands, and discontinued distribution of multiflora rose, which was coming under increasing fire from the agriculture community for spreading to pastures.

That same year the U. S. Fish and Wildlife Service voiced concern that the Department had no minority employees, especially blacks, and Towell ordered every effort be made to employ minorities.

There were a number of personnel changes within the Department during the Towell years. In April, 1959, Dr. G. B. Herndon retired and Paul G. Barnickol was promoted to chief of fisheries. Biologist John Funk replaced Barnickol as superintendent of fisheries research. In July, Floyd C. Larsen replaced Chief Engineer J. Warren Smith, who resigned. District Forester Osal B. Capps became state forester when George O. White retired after twenty-one years of service, January 1, 1960. To honor Missouri's "first" state forester the Commission renamed its nursery the "George O. White State Forest Nursery."

In 1961, Lee C. Fine was promoted to assistant state forester, as was John E. Wylie. In December, 1961, Dr. Forrest Olin Capps resigned as superintendent of Education to take a post with the U. S. Fish and Wildlife Service and Clarence E. Billings was named his successor in March, 1962.

In August, 1962, Biologist Harold V. Terrill became the first employee of the Conservation Commission to reach the twenty-five-year mark. In 1963, Montie Glover retired as Fiscal Section chief after thirty years in that post, four of them with the old Fish and Game Department, to be replaced by Vernon E. Sievert. Floyd C. Larsen retired and Charles E. Hooker was named chief engineer. He had joined the Department in 1960, and been promoted to assistant chief in 1962. Director William E. Towell reached the twenty-five-year milestone in 1963.[8]

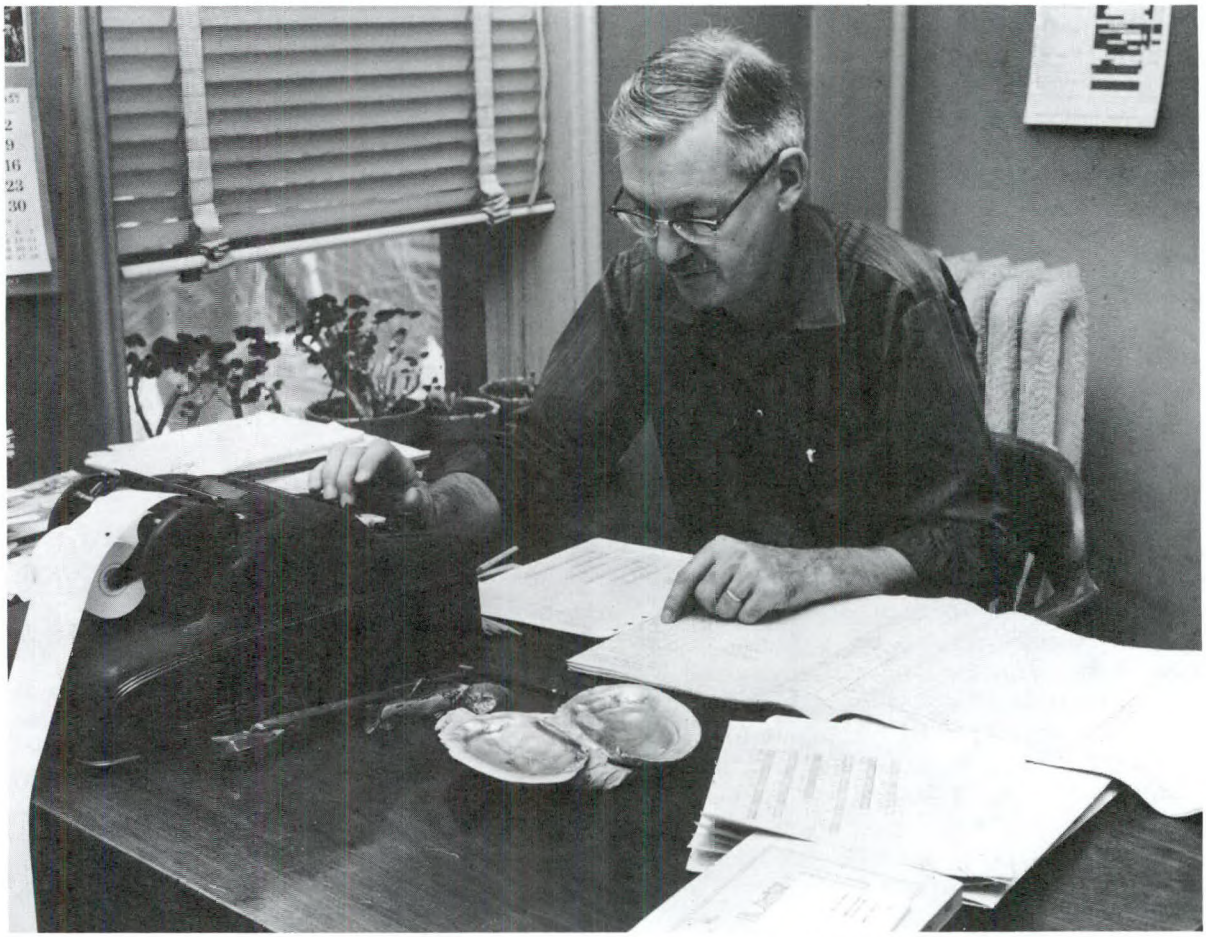


Dr. G. B. Herndon, a dentist by training, retired in 1959 after a career that began with the old Fish and Game Department. He was retained by Bode to guide the Department's early fisheries program.

In February, 1965, Kerwin F. Hafner was named assistant state forester replacing Lee C. Fine, who resigned to become director of state parks. In July, Allen Brohn and Reed Twichell were assigned federal aid coordinator responsibilities, replacing Paul Q. Tulenko, who became the Department's first landscape architect. This was a pre-retirement position for him. That same month Forester David D. Hurlbut was promoted to the post of assistant operations officer. Julian H. O'Malley became the Department's first full-time attorney with the retirement of Aubrey R. Hammett.[9]

In 1966, Department employees were invited to join a union of state employees. The Commission voted that they were welcome to do so, however no Department em-

[8] Others reaching twenty-five years of service in 1963 were Field Service Agent J. Lewis Berrey, Field Service Chief Kenneth R. Hicks, Biologist A. Reed Twichell, Chief Clerk H. Reed Frisbie, Mail Room Supervisor Francis J. Mertens, Agent Roy N. Tomlinson and Hatchery Supervisor Robert H. Price.



John L. "Slim" Funk, long-time superintendent of Fisheries Research, developed many of the programs of investigation upon which fishing regulations were to be based.

ployees chose to join. In July of that year, Werner O. Nagel was assigned the task of bringing his 1934-37 epic study of Missouri game and furbearers up to date. This resulted in the book *Conservation Contrasts*, published in 1970.

The Conservation Commission during the Towell years started with Ben Cash, Kennett auto dealer, Joe M. Roberts, Gallatin newspaper publisher and owner of some telephone companies, Frank P. Briggs, Macon newspaper publisher, and Dru L. Pippin, Waynesville resort owner.

Roberts' term expired in June, 1957, but he continued to serve until Ted Butler was appointed in January, 1958.

Butler's appointment was hailed by conservationists because of his long service as a volunteer and former executive director of the Conservation Federation. But his term was troubled because he was often at odds with his fellow Commissioners and the Department staff over quail and smallmouth bass stocking, which he favored.

[9] Twenty-five-year service awards in 1965 went to Refuge Manager Lyman J. Chronister, Agent Arthur A. "Jack" Frost, Biologist Charles W. Schwartz and Forestry Aide Alton P. Robinson. Twenty-five-year service awards in 1966 went to: Protection Section Agent Chief James L. Bailey, Education Advisor Dorris W. Frazier, Field Service Agent Paul B. Johnson, Education Advisor A. R. Mottesheard, Agent Supervisor Hugh F. Pritchard, Superintendent of Wildlife Research Bill T. Crawford, Assistant Game Division Chief Dunbar Robb, and Refuge Manager Ray Woodring.

Frank Briggs was reappointed by Gov. Blair in June, 1959, but Dru Pippin was replaced by Ewart H. Burch, a Maryville banker.

Burch was an ardent quail hunter and came onto the Commission with the avowed purpose of getting the Department to again stock quail. But after a few months he became convinced of the futility of stocking and publicly withdrew his support for it. He became a staunch supporter of getting the Department staff into its own building.

Ben Cash was reappointed for a second term by Gov. Dalton, in 1961.

In February, 1961, Frank P. Briggs was offered the post of under-secretary for fish and wildlife in the U. S. Department of the Interior and Dru L. Pippin was reappointed by Governor John Dalton to fill the vacancy. Pippin resigned on September 24, 1964, ending fifteen years and eight months Commission service—the longest term served by any commissioner.

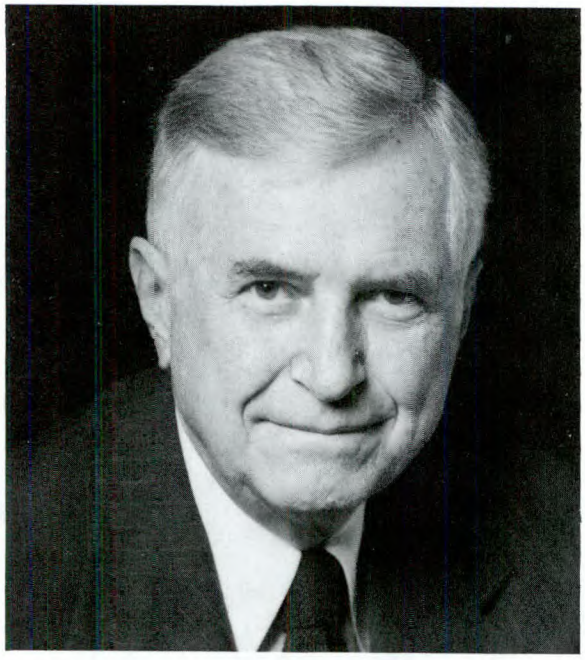
Pippin was replaced by August A. Busch Jr. of St. Louis, who served out the ten months remaining of the Briggs/Pippin term.

William R. Tweedie, Jefferson City footwear manufacturer, replaced Ted Butler in August, 1963. Both he and Busch were Dalton appointments.

In July, 1965, Gov. Warren E. Hearnes named Robert G. DeLaney, Charleston farmer, and Jim Tom Blair, St. Louis insurance executive, to replace Ewart Burch and August A. Busch Jr., respectively. Blair, DeLaney, Tweedie and Cash were the Conservation Commission when Towell submitted his resignation, effective January 1, 1967, after ten years as director and twenty-eight years with the Department.

He cited several reasons for leaving. Most of the things he had set out to do had been accomplished. At age fifty it was likely to be the last time he could make a career change.

It also was true that he was increasingly at odds with Gov. Hearnes, but he said he felt insulated from anything Hearnes could do so long as he had the support of the Commission.[10]



Bill Towell had a distinguished tenure as director from 1957-1967, welding the Department both administratively and physically. He went on to become chief executive of the American Forestry Association in Washington, D.C.

Towell said one time, "After about ten years a director has had to say 'No!' to enough people that little reservoirs of resentment are built up. This destroys a man's effectiveness and it's time for him to move on."

There were a number of job offers—as director in several states or positions with the federal government. Then he was offered the job of chief executive with the American Forestry Association in Washington, D.C. "If I had tailored a job myself," he declared, "I couldn't have designed a better one. I knew it was time to go."

Reflecting on his ten years as director, Towell asked: "What am I least proud of? Probably the alienation of the Federation and my inability to work well with the state parks directors. Instead of improving relations, I'm afraid I got us further apart."

[10] Both Blair and DeLaney said that at this time Towell no longer had their support, though they probably were not aware that he had been approached to run against Hearnes in the Democratic primary. Towell said he had no interest in a political career.

He said he was proudest of welding the Department together administratively, of getting it together in its own headquarters, of simplifying regulations and emphasizing the acquisition of public lands for recreation, "while never, at any time, yielding on the Commission's constitutional authority."

The Noren Years

There were a number of applicants for the director's post following the announcement of Towell's resignation. All but two were from within the Department.

The Commission conducted interviews on December 20-21, 1966, and at its regular meeting December 21 announced that it had selected Biologist Carl R. Noren to be the new director, effective January 1, 1967.[1]

Noren was fifty-two years old when he assumed the reins. Born in Providence, Rhode Island in 1914, Noren had lived for a time in Michigan, where he first gained his love for the outdoors playing along the St. Joseph River and Lake Michigan. His father was an ardent hunter and fisherman and Noren was introduced to those sports early. The family moved to Missouri when he was thirteen and he hunted waterfowl along the upper Mississippi in what he viewed as the golden years of wild fowling.

While still in high school, Noren decided he wanted a career in wildlife work. He visited the manager of the Forest Park Hatchery, E. M. Kopplin, to ask him how he could pursue a career in wildlife. Kopplin, voicing the conditions of that day, told him to "get to know the right politicians." He was introduced to professor Rudolf Bennitt in 1931 and entered the University of Missouri in 1932.

But things had changed when Noren took his degree in 1937. There was a new Conservation Commission about to take over from the old political Fish and Game Department. He re-entered the university as a graduate student in 1938, studying bobwhite quail. In 1939, Bennitt helped him secure the first Edward K. Love Fellowship in wildlife conservation and assigned him to study raccoons,



Carl Noren joined the Department in 1940 as a biologist assigned to study raccoons. His duties changed to deer restoration and river basin studies before he rose to the position of director in 1967.

which were at an extremely low population level. As a result of his research, the Commission adopted a tagging system that Noren feels may have played a role in their eventual comeback. At any rate, in Missouri wildlife annals the raccoon population rise ranks with the comeback of the deer and wild turkey.

In July, 1940, Noren was hired as a federal aid project leader (biologist) assigned to the northeast part of the state, and also to serve as furbearer biologist and continue his

[1] Those interviewed December 20 were Assistant Game Division Chief Allen Brohn, Assistant Director Paul G. Barnickol, Fisheries Division Chief Charles A. Purkett Jr., Game Division Chief Ted Shanks, Assistant Game Chief Dunbar Robb, Planning Officer Edwin H. Glaser and Biologist Carl R. Noren. Those interviewed on December 21 were Assistant Director Larry R. Gale, Field Division Chief J. Vernon Bennett, Metropolitan Services Coordinator Richard H. Rotsch, Supervisor of Wildlife Research Bill T. Crawford, Federation Executive Director Ed Stegner and Floyd Stewart. Gale, Bennett and Noren were recalled for futher interviews before announcement was made that Noren had been selected.

raccoon research. He eventually took his master's degree in 1941.

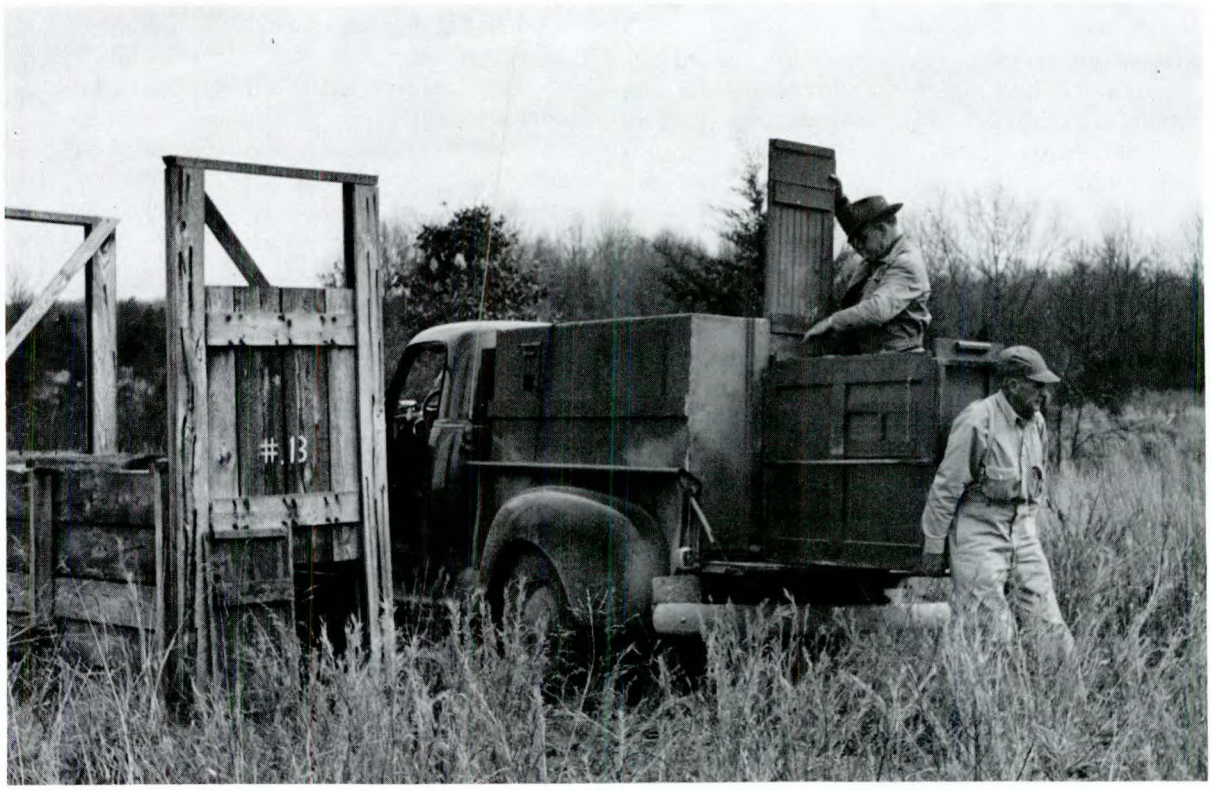
Later he was assigned to deer trapping and relocation, which he felt was the most enjoyable assignment he ever had with the Department. In December, 1941, Noren entered military service where he rose to the rank of captain, returning to the Department in January, 1946.

Bode needed someone to keep tabs on the many river basin projects then under way and assigned the job of liaison with the U. S. Corps of Engineers to Noren. In that capacity he had to work with many other state officials involved in such work, including various politicians and political appointees. It was a chore Bode never relished and one that Noren says was never really to his liking either, although he became very skillful at it.

Almost forgotten now are the struggles with the Corps of Engineers during the late 1940s and subsequent years. Those were the years of the Pick-Sloan Plan for the Missouri River Basin, and the Arkansas-White-Red River Basin Interagency Committee, all vital to the future of Missouri's rivers. Noren feels his work helping the state devise policies on Corps proposals for river basin work was the most important of his career. He had a hand in drafting the Commission's stand against dams on the Ozark streams. Missouri at that time was almost the only state that stood in opposition to many of the Corps' plans.

Noren occupied an unusual position, assigned as a biologist in the Game Section, but actually working on the director's staff. He was transferred to the Fisheries Section in 1948, still serving as liaison man, but in September, 1958, he resigned to take a post with the National Park Service.

After only a month at that job he returned to the Department, this time assigned



As part of the deer trapping and relocation efforts, deer were live-trapped in wooden crates, then transferred by truck to areas with acceptable habitat.

to the Fish and Game Division but essentially continuing liaison with various other agencies. When the new Planning Section was created in 1964, he was assigned to it and given the additional duties of stream access acquisition. He was serving in this capacity when the Commission tapped him for director.

The biggest problem facing Noren was one of finance. Shortly after he took over as director, Fiscal Officer Vernon Sievert told him that the Department was almost broke. Funds in the reserve were at a dangerously low level and the outlook was grim.

Up to this time, the primary source of funding came from hunting and fishing licenses, plus various federal aid programs in wildlife, fisheries and forestry. This was the traditional funding source for most fish and game departments. But even though the population was rising, the sale of licenses was not rising at the same rate. At some time in the not-too-distant future the rising curve of expenditures would cross the line of income—with disastrous results. There were increased demands on the Department for programs and services, without additional means to fund them. On top of this, steadily rising inflation was reducing what the dollar would buy and because of the salary situation employee turnover had reached twelve and one-half percent. Noren resolved at once to seek some means of additional stable funding for the Department.

It was out of this resolve that the *Design for Conservation* came about, which became the most important accomplishment of Noren's career.

The exact sequence of events that eventually led to the conservation sales tax is obscure. Carl Noren believed it began in 1967, when he discussed non-game programs in the U. S. with Starker Leopold at a wildlife conference. It might have gained impetus at a later wildlife conference the same year, when sources of funds for non-game programs were discussed. Or when Larry Jahn, of the Wildlife Management Institute, told Noren about a soft drink tax he had heard of.

Any of these could have been a starting source. The only thing sure is that Mr. and Mrs. Warren Lammert met with Noren that same year—1967—to ask the Department for help in hosting the National Audubon Society meeting to be held in St. Louis in 1969, offering their own services to the Department in return. Noren thought Lammert might lead the way toward the additional funding so desperately needed.

Lammert did serve as a catalyst to get something under way to provide more funds for expanded Department programs. In meetings with officials of the Conservation Federation of Missouri, Lammert suggested that a citizens committee be created to get additional strength from both within and without the Federation.

In April, 1968, Lammert met with the Conservation Commission to urge an expanded outlook, and the Commission directed the staff to develop a program for those who simply enjoy wildlife for its own sake, as well as hunters and fishermen.

Eventually a three-man team, headed by A. Starker Leopold with Charles H. Callison and Irving K. Fox, was commissioned by the Edward K. Love Foundation to make a study of the Department nd its programs and make recommendatio as to its future course of action. The study g under way in January, 1969.

Noren had asked L opold to make the study, but Leopold felt that a three-man team might have more credibility. Noren suggested Charles Callison, and Commissioner Robert DeLaney suggested Irving Fox. Noren had known Fox during his river basin days and knew he had special talents to bring to such a study team.

Leopold, formerly a Department biologist, was a professor with the forestry and conservation school of the University of California at Berkeley. Callison, too, had been Information chief with the Department but presently was executive vice president of the National Audubon Society. Fox was professor of regional planning at the University of Wisconsin.

They completed their study and released their findings as *The Missouri Conservation Program Report.* It was presented to about two hundred concerned citizen-conservationists assembled at Department headquarters on May 23, 1970. The *Report* said that organization and staffing were generally excellent, but the Department should broaden its



Noren addresses an audience at a public meeting in 1970 to introduce the Missouri Conservation Program Report, an assessment of Department direction conducted by noted conservationists Charles Callison, Starker Leopold and Irving Fox, on stage left to right.

programs to more fully include management of *all* wildlife, including non-game species, to provide for outdoor recreation outside the traditional realm of hunting and fishing, and to provide for a full range of natural values on Department lands. The *Report* did not deal with funding such an endeavor.

The Department, anticipating citizen reaction, had prepared a bulletin entitled *Challenge and Response* that was a proposal to accomplish those things and estimated they might cost an additional $21 million per year.

A Citizens Committee for Conservation (CCC) was formed that same day with Ted Scott, a Buffalo, Missouri, attorney, as chairman. It called on the Department to study ways of funding the proposed program. Scott had long been active in the Conservation Federation of Missouri.[2]

A fiscal consultant, Arthur Betts, was employed and he described several potential sources of revenue for funding. The Business School at Missouri University did a detailed study of the three most promising sources and a soft drink tax was believed to be the best source. Within the CCC a legal committee was formed and an initiative petition drawn up.

Meanwhile, the CCC asked the Department to amplify the *Challenge and Response.*

[2] In recognition of his years of service to conservation, and especially for heading the fund drive, the Commission voted Scott a Master Conservationist Award in 1972, which was presented in 1973.



Attorney Ted Scott, a long-time supporter of conservation in Missouri, became chairman of the Citizens Committee for Conservation formed in 1970.

The Department did this and in September, 1971, released the *Design for Conservation.*

Design is the basic blueprint for Missouri's outdoor future—a plan to help mitigate the adverse impacts of modern development. It was, and is, a long-range plan to expand the state's wildlife conservation program and provide more recreational opportunities for all Missourians.

Under *Design* the Department pledged to buy land for recreation, forestry, and to protect critical habitats for rare or endangered species of plants and animals.

The Department pledged to increase its services to the public in the areas of wildlife and forestry conservation. And it promised increased research into forestry and all species of wildlife—whether considered game or not—and broadened management programs for wildlife and forestry. It called for an expansion of most existing programs, and provision of more outdoor recreational opportunities for the future.

Design was printed as a booklet, but later was printed as a special edition of the *Conservationist* magazine, in order to reach many more people.

With the *Design for Conservation* as a concrete proposal, the CCC launched its petition drive in October, 1971, to secure funding to put it into effect. The petition, in the form of a constitutional amendment, asked the people of Missouri to impose on themselves a one cent tax on each sixteen ounces of carbonated soft drink they bought; it was expected to yield about $20 million annually to support the *Design* proposal.

Conservation Federation Executive Ed Stegner took on the job as day-to-day executive in conducting the petition drive. The Federation made available to the CCC not only Ed's services, but its entire staff and offices. With volunteer help Ed organized the campaign, conducted the meetings, and in nine months—on July 5, 1972—filed 164,000 signatures with the secretary of state.

Throughout the petition campaign, opposition came from the bottling industry. The soft drink manufacturers said that adding a penny to the price of their drinks would result in many of them going broke. (In light of what we subsequently paid for soft drinks, that statement is rather humorous. The price of sugar took a big jump just about that time and soft drinks went up from ten cents or fifteen cents to fifty cents or more.) The brewers sided with the soft drink people, and both tried to enlist the grocers to oppose the petition. It was said that the opposition had a $3 million war chest to beat the amendment.

As it turned out, they didn't need it. A Jefferson City attorney employed by the bottling industry met with the secretary of state at the same time the petitions were turned in and told him that the petitions were flawed because they lacked an eleven-word enacting clause, "be it enacted by the people of the State of Missouri."[3] The attorney general ruled that the secretary of state should not certify the petitions. The CCC carried the matter all the way to the state Supreme Court, which ruled against the petition.



Drink tax petitions filed, criticized

A lawyer for an "unnamed group" opposing the soft drink tax petition said that it was contrary to the constitution. The opponents turned out to be bottling industry representatives who feared a tax would reduce sales. The initiative petition gathered sufficient signatures, but was dismissed on a legal technicality.

It was a staggering blow.

The steering committee of the CCC met immediately and re-endorsed the effort. On December 2, 1972, it appointed a six-person executive committee to streamline the decision process. This committee met frequently over the next two years and learned from a public opinion poll that a sales tax might be a better way to fund the program. It was calculated that a one-eighth of one percent sales tax would provide the $20 million to fund the program outlined in *Design*.

During the winter of 1974-75, the CCC held a series of meetings with citizens who had helped in the initial petition drive—nearly all wanted to try again. A lawyer was hired and a new constitutional amendment petition drawn up, this time providing for a one-eighth of one percent sales tax earmarked for conservation. The new petition drive was kicked off in July, 1975.

The CCC, working with volunteers across the state, gathered 208,000 signatures, and turned them over to the secretary of state. This time there was no challenge to the legality of the petitions. The proposed amendment was certified for the ballot, and the issue was voted on as Amendment 1 on November 2, 1976. It carried by approximately 30,000 votes.

This summary of events doesn't begin to tell of the blood, sweat and tears that went into the two initiative campaigns. The effort spanned several years—perhaps as far back as 1967—and involved the hard work of thousands of volunteers.

The backbone of the drive, as Carl Noren told the North American Wildlife Conference in 1978, was the Conservation Federation. Ed Stegner devoted himself full-time to the project in the final two years, with the full backing of his board.[4] They provided him with a full-time assistant, Charles Davidson, and an additional assistant, David Beffa, the last few months. To further help the effort, it made available the CFM office and its stenographic staff, and they were aided in turn by volunteers led by Doris "Dink" Keefe, who worked nearly every day in the final year.

The Citizens Committee for Conservation wanted at least 150,000 signatures. They needed a minimum of 100,000, which had to be from seven of the state's ten congressional districts. They eventually gathered 208,000 signatures. Following the earlier campaign a law had been passed requiring signers to be registered voters, which vastly complicated the signature-gathering process.

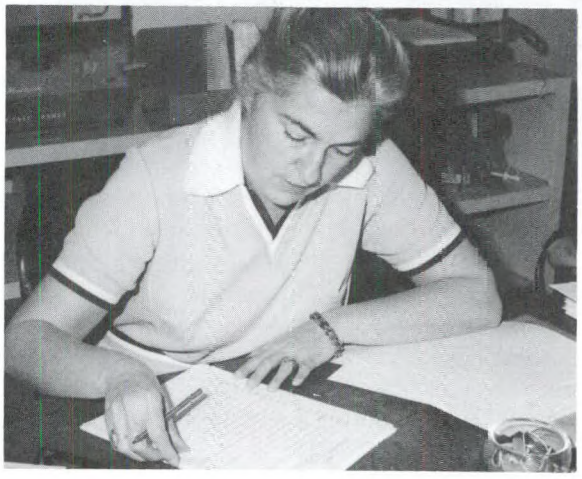
Collecting 208,000 signatures was a great deal of work. A statewide organization had to be set up, with a chairman in every county. The chairman's job was to get the minimum number of signatures, which meant organizing volunteers to work shopping cen-

[3] It is interesting to note that the petition which created the Conservation Commission in 1936 did not have an enacting clause either.

[4] Stegner was voted a Master Conservationist Award in 1976 for his efforts in helping pass the conservation sales tax.



H. Nat Reed, Assistant Secretary of the Interior, joined Ed Stegner in 1975 to publicly endorse the campaign for a one-eighth cent sales tax for conservation.



Mrs. Doris J. Keefe led the the volunteers in the conservation sales tax campaign.

ters, fairs, sporting events—anywhere people gathered. Hunting and fishing club folks were good workers, but often the best signature-gatherers were college students, birders and hikers.

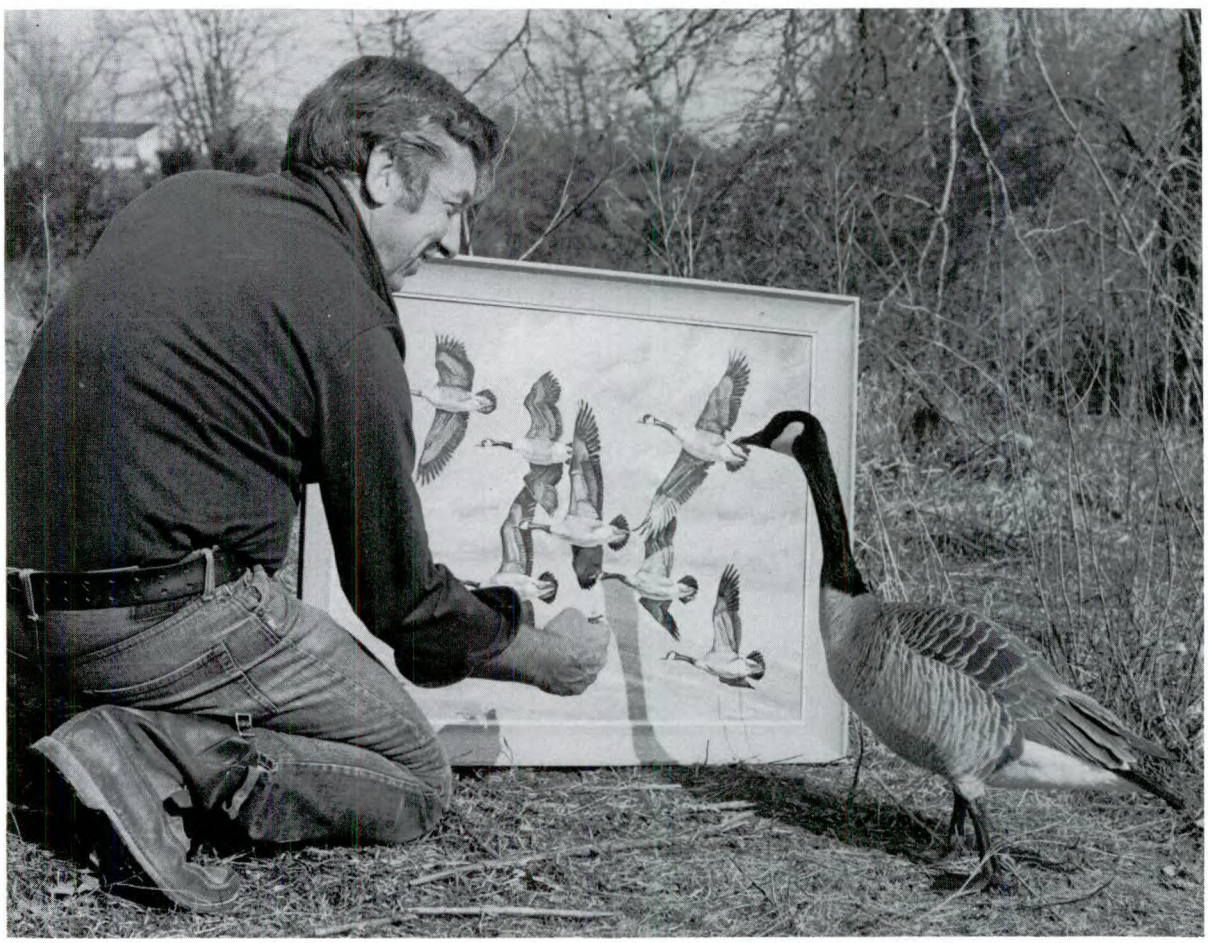
After the signatures were gathered and

approved, the CCC needed funds to conduct a publicity campaign to get out a favorable vote. They hired a public relations firm but later dismissed it after it claimed it could not raise enough funds or pass the issue. The CCC would raise its own funds and conduct its own campaign.

Again, volunteers came forward. Some were associated with advertising or public relations firms and helped with publicity and advertising. Others raised money by conducting white elephant sales, auctions and chili suppers. Charles Schwartz donated a painting and several wildlife sketches that were made into prints to be sold as fund raisers. Many others dug down into their jeans and donated cash to help the cause. In all, about $170,000 was raised for advertising and other campaign expenses.

The CCC kept a steady stream of publicity going to the public. The *Conservationist* magazine reached hundreds of thousands of people with its articles on *Design.* Workers were kept posted with newsletters.

Newspapers, radio and television stations were approached—a majority of them backed the campaign editorially or in other ways. Endorsements were sought and the first to endorse the proposal was the American Association of University Women. Among many other organizations endorsing the proposal, both state and national, were the National Wildlife Federation, National Audubon Society, Sierra Club and National Rifle Association.



Charles W. Schwartz, artist, and Canada goose, model, inspect the painting Schwartz executed in a fund-raising drive for the sales tax campaign. Sales of prints of the painting raised over $80,000 for the Design *effort.*

Even the Secretary of the Interior endorsed the proposal and came to Missouri to speak for it.

Opposition was low key. A business-financed lobbying group opposed earmarked funds (though not the *Design*), and the few newspapers that opposed the amendment did so largely on the basis of a news release from this group. There was some opposition from farm groups, who feared a land grab even though the Department had pledged not to use its power of eminent domain, or as a hangover from the scenic river disputes. In almost every case the CCC countered its opposition well.

So the amendment carried, though it was the following day before election results were certain. Its strongest support came from metropolitan areas, where people most appreciated the need for more places to recreate. They also recognized the need to protect and preserve wild things of field and forest for future generations. The proposal fared well wherever there was a college. It failed in rural areas where folks already had ample outdoor opportunities, though even here the vote often was close. Beginning in 1977, when the amendment became effective, the Department would have adequate funding for its broadened programs now well-known as the *Design for Conservation.*

Life for a director is never entirely smooth, and Noren had his share of rough spots. Always uppermost in his mind was his determination to find a stable source of funding for the future. Every event that might affect the course of the *Design for Conservation* was of concern.

The same month Noren became director it was learned that employees of the printing firm that had printed the 1967 permits had been selling "seconds" on the black market. The conservation agents soon put a stop to this, but it was a little event that a new director could have done without, faced as he was with a fiscal crisis. On top of that, the legislature was considering bills to fix permit prices itself and to repeal the penalty provisions of the Wildlife and Forestry Act. The Commission immediately appealed to the people and the legislature dropped further consideration.

In August, 1967, the "purple martin affair" created a touchy situation with the governor's office.

Biologist Mike Milonski was the first one notified when a lady who lived across the street from the mansion phoned him the evening of August 21, complaining that people were shooting birds on the governor's lawn. When Milonski arrived at the scene about 9:15 p.m. he saw five men there, and the ground littered with what he saw were purple martins. He identified himself to the

Purple martins slaughtered at mansion

"Wholesale slaughter!"

That's how Ben Krider, conservation agent for Cole County, described the killing of between 1,800 and 2,000 purple martins near the Governor's Mansion Monday night.

Krider said he believes five or six local men did the shooting. He declined to name the men until the Department of Conservation completes its investigation.

Lt. Col. K. K. Johnson, of the Missouri Highway Patrol, said Gov. Warren E. Hearnes mentioned to a trooper stationed at the mansion that the birds—the flock was estimated at about 10,000—were a menace and something should be done to disperse them.

The "Governor didn't say how it should be done," Col. Johnson said, "just that something should be done."

The trooper then passed the word to Stanley Diemler, who works for the State Division of Planning and Construction.

Johnson stated that the patrol had nothing at all to do with the shooting.

Police Chief Claude Short quickly took city authorities out of the picture.

See MARTINS, page 8

The "purple martin affair" enraged birdlovers and thoroughly embarassed the Hearnes administration. This account was printed in the Jefferson City Post-Tribune, *but the story gained national notoriety.*

men and was told that John Paulus, who headed the Division of Design and Construction, had ordered the shooting.

Subsequent investigation revealed that Governor Warren Hearnes had made an off-hand remark to one of his Highway Patrol bodyguards that "something" should be done about the "blackbirds" roosting near the mansion. The trooper had relayed this information to his superior, who had relayed it to the office of Design and Construction. A member of that staff had organized a group to shoot what they assumed were unprotected blackbirds that summer evening of August 21. Unfortunately, their zeal had outstripped their knowledge: the "blackbirds" were purple martins which had gathered prior to their annual migration.

Since the martins are migratory birds, protected under international treaty, the U. S. Fish and Wildlife Service was brought into the case, though it eventually was prosecuted in state court.

The news media had a field day with the affair, and it got national attention. Governor Hearnes, whose innocent off-hand remark had precipitated the whole incident, got letters and denunciations from all over the country.

The five shooters subsequently pleaded guilty to charges of shooting protected wildlife and were fined. It was another incident a new director could have done without, but another problem was waiting in the wings.

Some time in June, 1967, Bill Scott of Ellington shot a black bear that attacked his pigs. Black bears were so rare as to be almost non-existent in Missouri, so interest in the incident was high. When word reached the Department, Assistant Game Chief Allen Brohn, who was working in the vicinity, was asked to pick up the skull and skin of the bear for use by the Cooperative Wildlife Research Unit in Columbia. Brohn, accompanied by Conservation Agent Tom May, picked up the skull and skin on June 22, 1967, and turned it over to the Research Unit's supervisor, Dr. Thomas Baskett.

In August, Reynolds County Prosecuting Attorney William H. Bruce Jr., sent a letter to Baskett indicating that an "oppression in office" might have been committed or that the bear skin might have been stolen from Scott. He hinted at possible prosecution of those persons who had deprived Scott of the bear skin. On September 13, Bruce had Conservation Agent Tom May arrested and issued warrants for Brohn and Baskett.

The case drew some media attention, to the considerable embarrassment of all concerned. May posted bond and was released, and Brohn and Baskett carried $500 in cash as bond money anytime their travels might take them close to Reynolds County, just in case.

The Commission ordered its legal counsel, Julian O'Malley, to secure local counsel on behalf of its employees, May and Brohn. Working through the local attorney, O'Malley agreed that if the prosecutor would dismiss his case, *nolle prosequi*, at no cost to the defendants, Scott would be loaned the skin from time to time for inspection and display, but ownership would remain in the Department.

This seemed to satisfy all parties, but it



Julian O'Malley was legal counsel when Agent Tom May was arrested and warrants were issued for Allen Brohn and Thomas Baskett in the "bearly" believable case of the confiscated bear skin.

was a cause of some concern during the months that it took place. The Commission was insistent on rights to the skin and skull of a protected animal, and wanted to back its employees against what was considered eccentric and capricious behavior on the part of the prosecutor.

As a postscript to the affair, Bill Scott eventually became sheriff of Reynolds County. Some years later the bear skin was stolen in a break-in at the University's Wildlife Research Unit.

Commissioner Ben Cash's second term expired in June, 1967, and William A. Stark of Bethany was named as replacement. Stark was a farmer and businessman who had been a conservation agent for twenty-one years, from 1946 until he resigned in 1967 to pursue private interests.

In August, 1967, Commissioner William R. Tweedie Sr., submitted his resignation to Governor Hearnes. A Jefferson City footwear manufacturer, Tweedie had been appointed in 1963 by Governor John Dalton and was universally respected. Tweedie's health had been failing for some time and he died a few months later of a brain tumor. His unexpired term was filled by the appointment of Lewis D. Linville of Kansas City in September, 1967.

Linville was president of a machinery company in Kansas City and active in Ducks Unlimited. He served until February, 1970, when Harry Mills of Clinton, farmer, insurance man and bank president, replaced him. Mills also was president of Mo-Kan Basin Flood Control and Conservation Association, a group promoting Corps of Engineers projects in the region. That alliance was to cause more concerns for Noren when a lawsuit brought to halt construction of Truman Dam became an issue.

In July, 1971, Governor Hearnes reappointed Jim Tom Blair and Robert G. DeLaney to second terms as commissioners.

In the 1970s, state government reorganization occupied the Commission, as it sought to retain its powers and to cope with demands for a new state department of natural resources. The staff prepared three amendments to proposals under consideration in the legislature, which the Commission endorsed.

These were: (1) To retain the present constitutional authority of the Conservation Commission with regard to employment of personnel, setting of job standards and administering a personnel system; (2) To retain the dedication of monies presently earmarked for the Conservation Commission and to establish a state park fund by using the present language of the constitution, but increasing the amount of earmarked funds from one mill to three mills to operate parks, boating and outdoor recreation programs; and (3) To establish a Department of Conservation which would include parks, boating and outdoor recreation, and to establish a separate department of environmental affairs to which could be assigned the agencies for regulatory interests in natural resources such as water pollution, water resources and air conservation.

At one time during legislative debate, proposals would have placed all these items under the four-man Conservation Commission. The Commission had an interest in parks, boating safety and outdoor recreation, but did not want to get involved in regulating the other resources. State Representative Harold Volkmer was working closely with the Department during reorganization proceedings. Volkmer incorporated the suggested amendments into pending legislation.

In November, 1972, the citizens approved reorganization, but actual placement of various agencies into state departments was not accomplished until the following year. One item affecting the Commission was a provision that called for appointment to the Commission by the governor, "by and with the advice and consent of the Senate." This was the only change that affected the Conservation Commission.

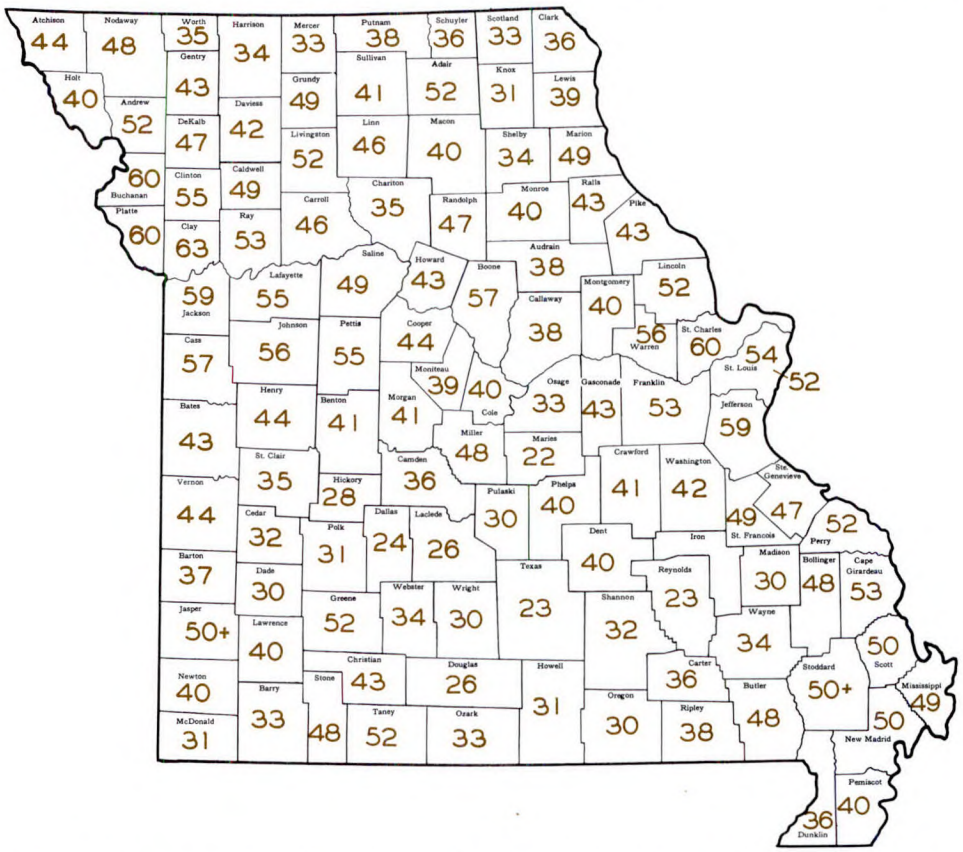
Volkmer planned to place into the new Department of Conservation (which would be headed by the Conservation Commission) the State Parks, Interagency Council for Outdoor Recreation, the Lewis and Clark Trail Commission, and the Boat Commission. But this plan was not adopted, and most of the other agencies went into the new Department of Natural Resources. The Conservation Commission and its Department stayed as it had been since 1937.

Reorganization became effective in 1974, and Governor Kit Bond declared his intention of appointing a new Conservation Commission. He believed that reorganization gave him this power, while Representative Volkmer insisted that it did not. An attorney general's opinion indicated Bond could make all new appointments.

In June, Bond appointed a "new" Commission consisting of Jim Tom Blair (reappointed for a term to expire in June, 1977), G. Andy Runge of Mexico (reappointed for a term to expire in June, 1979)[5], Gene Dement of Sikeston (term to expire June 28, 1975), and Robert E. Talbot of Neosho (term to expire June 28, 1977). Dement was a southeast Missouri farmer and Talbot was a Neosho businessman. Harry Mills and Robert DeLaney were ousted.

The "new" Conservation Commission met June 28, 1974, at a special meeting in the Senate hearing room at the State Capitol; Dement and Talbot presented their credentials and were sworn in. The new officers were: Runge chairman, Blair vice-chairman, Talbot secretary and Dement member. They renewed the appointment of Carl Noren as director and approved the continued employment of the present personnel.

Almost at once Bond's commission appointments—not only in the Conservation Commission, but all such appointments—came under fire. Blair and Runge's appointments did not need to be confirmed by the Senate under the new constitutional provision, but Dement and Talbot both needed to



A map showing the percentage of "yes" votes for the conservation sales tax illustrates strong voter approval in the metropolitan and urban areas, decreasing support in rural regions.

[5] Runge had originally been appointed to the Commission in July, 1973, replacing William A. Stark. He had been active in Gov. Bond's campaign for governor, and was a Mexico attorney. He was active in the Conservation Federation and had a keen interest in conservation matters.

be confirmed. By December this was being debated in the senate, but a member of another state commission brought suit against his ouster and the matter went to the courts.

At the December Commission meeting, Gene Dement and Robert Talbot, not expecting to be confirmed by the Senate, expressed their pleasure at having had the opportunity to serve. They did not attend the January, 1975, meeting because of "legal uncertainties surrounding the appointment and confirmation of [the] two Commissioners under the 1974 reorganization of the Executive Branch of state government," the minutes stated.

A *St. Louis Globe-Democrat* reporter raised the question of a quorum—since only two Commissioners were present, could they transact business? Andy Runge said that they must proceed with business and that actions could be confirmed when a third Commissioner was present.

The two continued to transact business until June when, "As a result of a decision by the Missouri Supreme Court on June 9, 1975, and the subsequent withdrawal of an opinion by the attorney general relating to the appointments of Commissioners as head of the Department under the Reorganization Act of 1974, the governor notified Mr. Robert G. DeLaney and Mr. Harry Mills they will continue as current members of the Conservation Commission," according to the minutes.

Bond had withdrawn Robert Talbot's name from consideration by the senate, and the senate had refused to confirm Gene Dement's appointment.

The "old" Conservation Commission confirmed all actions taken between July 22, 1974 and May 22, 1975, thus legalizing the actions of the two-man Commission.

The 1960s brought turmoil to Missouri in disputes over protection of wild and scenic rivers. These were of special concern to Noren because of their possible effect on the *Design for Conservation* program.

In the early 1960s, with scenic river protection in the air, a governor's committee was appointed, headed by Ed Stegner of the Conservation Federation. Work of this committee culminated in the designation of the Eleven Point River as a wild and scenic river



George N. Elder was the fisherman in the test case Elder vs. Delcour *that settled anglers' access rights on Missouri streams.*

in national legislation signed by President Lyndon B. Johnson on October 2, 1968. Scenic rivers designation was opposed by many in rural Missouri who felt they might lose control of lands adjacent to rivers. Canoeists occasionally were threatened and there were confrontations between floaters and local landowners.

The issue had been faced in 1954, when the Supreme Court had ruled on a test case involving fishermen's rights in Elder vs. Delcour. Fisherman George N. Elder of Jefferson City had been canoeing on Meramec River and was charged with trespass when crossing lands owned by James M. Delcour. Both men were friends and had agreed to the test case. Judge Gordon Dorris ruled that the Meramec River was "public water" and Elder had a right to be there. The appellate court in Springfield reversed that ruling, holding for the landowner. On June 14, 1954, the Supreme Court issued a sixteen-page opinion, written by Justice S. P. Dalton, that unanimously upheld the fisherman's rights. The opinion declared that the Meramec River was a public stream and citizens had a right to be there. It held that Delcour was not "absolute owner," and that his ownership was subject to "burdens imposed by the river," which included passage by floating and wading by the public. This should have settled the matter, but canoeists

in the 1960s were pushing for preservation of the streams' banks while landowners were fighting for their rights to exploit those banks if they chose to do so.

The governor appointed an interim committee on recreation and water use that included Noren and Stegner to conduct hearings and come up with suggested legislation to meet the need for a scenic rivers system. But in December, 1969, a group calling itself the Missouri Scenic Rivers Affiliation, headed by St. Charles school teacher Roger Taylor, launched an initiative petition drive to create a scenic rivers system in the state that would be administered by the Conservation Commission.

The most controversial aspect of the proposal was the creation of 300-foot scenic zones on 850 miles of nineteen streams. Within the zones, landowners would be forbidden to erect new structures or clearcut timber. There could be no dumping, littering, refuse burning, salvage or disposal operations.

All over the Ozarks landowners arose to combat the petition, ultimately forming the Show-me Heritage Association as the principal spokesman. Its avowed purpose was to fight the scenic rivers petition and to oppose the *Design for Conservation*, in the belief that the Commission was behind or at least supporting the petition. The Commission was caught in a difficult position: it supported the



Gov. John M. Dalton, left, and his brother, Supreme Court Justice S. P. Dalton, right, were both ardent conservationists. S. P. Dalton wrote the opinion in the landmark Elder vs. Delcour *case that declared Missouri streams "public waters."*

idea of scenic rivers preservation, but was opposed to the zoning provisions of the petition, which it felt deprived the landowners of rights without compensation. It issued a statement to that effect, which failed to register with the opponents.

Noren and others met with Roger Taylor and urged the petition be modified to drop the zoning feature and provide for acquisition in fee or easements from willing sellers. Taylor felt matters had gone too far for modification, but the petitions were withdrawn in May, 1970, when unknown persons bombed his car as it sat next to his home.

By this time most landowner leaders, farm organizations and the legislature recognized that some sort of protection system was needed. Noren reported in June that landowner leaders were moving toward some accommodation. Their more rabid followers, however, disavowed them.

There were two scenic rivers bills in the 1971 session of the legislature, but the Commission continued to take heat from those opposed to any scenic rivers bill. Noren pointed out to the Commission that if it supported some other agency administering a bill it might help the situation, but Commissioner Blair insisted that the Commission should stand fast.

In April, 1971, when members of the Show-me Heritage Association asked the Commission to disavow any intention of administering a scenic rivers system, the Commission was indignant. It issued a statement declaring that it was best qualified to administer a system, but that it was a matter for the legislature and the citizens of the state to decide which agency should oversee it.

The bills died and the entire matter gradually simmered down. Other than for portions of the Eleven Point, Current and Jacks Fork rivers, the state still has no system of scenic rivers preservation. Feelings still linger in certain quarters against the Department as a result of the controversy, and undoubtedly contributed to the opposition to the conservation sales tax in 1976 in certain rural counties. It was another matter that gave Noren problems during his term as director.

The issue of dams for the Meramec Basin was another matter that confronted Noren and the Conservation Commission. In 1966, Congress re-authorized a revised version of the Corps of Engineers' dam proposals for the Basin. In the 1970s the Corps acquired 28,000 acres and began construction of a dam on the Meramec River.

But times had changed and new federal laws had been enacted that were to have a bearing on this dam. Creation of the Environmental Protection Agency was one. Another was new emphasis under the Carter administration on the Fish and Wildlife Coordination Act that required input from other agencies relative to fish and wildlife. The Endangered Species Act was a third. Opponents of the dams began to cite these various acts in arguments against continued construction.

In August, 1975, Commissioner Talbot told the Commission about a float trip on the Meramec River he shared with Governor Kit Bond, and Bond had asked for the Commission's views on the dam. Its views were ambivalent. It basically stood for stream preservation, but recognized that a sizeable number of citizens favored flat water recreation close to the St. Louis metropolitan area. It felt that the decision rested with the citizens, and chose not to oppose Meramec Dam, though it insisted that mitigation of lost wildlife and forestry values should be a part of any plan.

At the same meeting a trio from the St. Louis area appeared before the Commission and asked that it oppose Union Dam to be built on the Bourbeuse River. The Commission ordered its staff to survey the wildlife values of the Bourbeuse and sound out sentiment in the area. The staff reported that the Bourbeuse River was a valuable wildlife asset and that sentiment of local citizens appeared to oppose the dam. On September 24, 1975, the Commission voted its opposition to Union Dam and reiterated its stand favoring stream preservation, with a system to be administered by the state and with adequate funding. This influenced the governor's opposition and the Corps' subsequent decision to drop plans for a dam on Bourbeuse River.

That left the Meramec Dam unsettled. Concerned that the Commission might waver on the Meramec Dam after its stand against

the Bourbeuse River Dam, James Gamble of the Meramec Basin Association came to the Commission in October, 1975, to ask it to reconsider its position on the Bourbeuse and to support the Meramec Dam. However, the Commission reaffirmed its opposition to the Bourbeuse Dam, and did not change its position on the Meramec Dam.

Meanwhile, public opposition to the dam continued to rise, based in part on its effects on rare and endangered species.

In September, 1976, Rep. Richard Ichord withdrew his support of the proposed Meramec Dam. Governor Bond proposed a public referendum on the question, asking if the Commission concurred. It did.

In the interim before the referendum was held, both opponents and proponents of Meramec Dam appeared often before the Commission attempting to influence its avowed neutrality. At last, in May, 1978, Commissioner J. Ernest Dunn asked the Commission to take a definite stand. Both sides were invited to argue their positions in July. After hearing the arguments, Commissioner Andy Runge moved that the Commission go on record opposing the Meramec Dam. The vote was unanimous and probably had an effect on the outcome of the referendum, which was held in ten basin counties in 1978. Some sixty percent of the voters were opposed to the dam. That effectively killed the project, though proponents continued to lobby for some sort of dams in the basin.

Noren was faced with yet another problem when, in 1972, suit was brought in federal court by the Environmental Defense Fund to halt construction of Truman Dam on the Osage River. Among others party to the suit was the Missouri Chapter of the Wildlife Society, many of whose members were Department employees.

This nettled Commissioner Harry Mills, who was president of the Mo-Kan Basin Flood Control and Conservation Association, a group active in promoting Truman Dam. Mills felt such action by employees was contrary to the "policy expressed by the Commission regarding Truman Reservoir." Commissioner Blair felt that perhaps the Commission had not been as positive in its position statement on Truman Dam as it might have been. Mills called on Noren to investigate the matter, adding that "he wanted it made clear that in no manner would he want to silence an employee of the Department [in providing] anything that is legitimate information." But the Commission ordered that employees would not provide affidavits in the case, but would respond if subpoenaed.

At the meeting in April, 1972, Assistant Attorney General Walter Nowotny, assigned by the Governor to represent the Water Resources Board, State Park Board and Inter-Agency Council for Outdoor Recreation, reported that Federal Judge John Oliver said plaintiffs had difficulty getting information from Department employees and he understood there was a policy inhibiting employees from providing information. The judge would look on any type of restrictions placed on employees as a violation of civil rights. The Commission rescinded its policy that employees might not furnish affidavits, and the matter ended there.

Other events during Noren's tenure were the construction of a Wildlife Research Center in Columbia, merging the Wildlife and Fisheries research staffs in 1970. In response to a growing number of muzzle loader hunting



The Wildlife Research Center in Columbia merged the Fisheries and Wildlife research units under one roof in 1970.

enthusiasts, the first "historic weapons" deer hunt was held October 21-29, 1967, on Caney Mountain Refuge. The first statewide archery deer hunt was conducted in 1968.

On March 16, 1968, Game Division Chief Charles A. "Ted" Shanks died of a heart attack. He had been with the Department since 1947, and Game chief since 1964. He was replaced by Allen Brohn.

Long-time Chief of Hatcheries A. G. Morris retired that year, after having begun his career in that post in 1933 with the old Fish and Game Department. He was replaced by Charles E. Hicks.

In April, 1968, Robert A. Brown of St. Joseph, long-time Federation board chairman and former Commissioner, was given the Master Conservationist Award.

The Protection Division was reorganized to provide more advancement positions, with creation of three "districts" within each of the nine Protection Regions of the state, and creation of "District Supervisors." The title "Superintendent of Protection" was changed to "Chief of Protection."

Controversy over gun control flared in the '60s and the Commission issued a statement supporting the legitimate use of firearms in June, 1968. Stix, Baer and Fuller of St. Louis stopped handling firearms sales and donated seventy-four guns to the Department's Hunter Safety program. The ten-shell limit first imposed at Fountain Grove was extended to include the Swan Lake Zone in 1971.

In November, 1968, the Commission took a step to modernize Department fiscal activities by authorizing the lease of a computer and hired its first computer specialist, James Bryant.

In 1969 the first trout stamps went on sale in an attempt to make trout stocking programs more self-supporting. In May of that year, the state's and nation's first Urban Fishing Program got under way in St. Louis city parks. This was expanded to Kansas City in 1978 and to St. Joseph (1981), Sedalia and St Louis County communities (1983), and Springfield (1984).

In July, 1969, Larry Gale was named associate director and Allen Brohn became assistant director for line functions. Dunbar "Dixie" Robb replaced him as Game chief.



Larry Gale, left, rose to the rank of associate director in July, 1969, assisting Carl Noren with everyday administrative tasks.



The triangle insignia designed by Charles Schwartz represents the conservation of wildlife, fish and forest resources in the state.

Citizens in Atchison County took matters into their own hands and constructed a dam for a twenty-eight-acre lake on Brickyard Hill Wildlife Area. A consulting firm determined that so large a lake presented a hazard and

it was later reduced to only thirteen acres.

In June, 1970, the Commission adopted a new emblem designed by Charles W. Schwartz—the now-familiar triangle with the oak leaf, bass and raccoon representing the forestry, fisheries and wildlife programs of the Department. November of that year an oxygen deficiency in the water at Lake Taneycomo seriously affected the trout fishery. The Environmental Protection Agency insisted on enforcing water quality standards, and the Southwest Power Administration insisted on receiving its quota of electric power. The Corps of Engineers was in the middle.

On November 5, 1970, Irwin T. Bode, the Department's first director, died in Whittier, California.

The state's Natural Areas System was created by the Commission in December, 1970. The Department administered this system until April, 1977, when it invited the Department of Natural Resources to jointly run it. Also in 1970, the Department received an award from the National Rifle Association for graduating its 100,000th Hunter Safety trainee. In February of that year, J. Vernon



Allen Brohn, above, became assistant director for line functions in 1969. James Schroder rose from conservation agent to metro services coordinator for the Springfield area. He is shown with assistants Candy Flint and Kay Thomas, below. A new Springfield Metro Office opened in 1987.



Bennett retired as chief of the Field Division. He had been one of the original twelve wardens of the old Fish and Game Department who successfully made the transfer into the new Conservation Department. He was replaced by Paul G. Brooks Sr. In December, 1975, James L. "Red" Bailey retired after thirty-four years of service, to be replaced by Earl P. Coleman as Protection superintendent.

In July, 1971, Dunbar Robb died of cancer. He joined the Department as a biologist in 1941, and was associated with the dramatic deer restoration program much of his career before becoming Game Division chief in 1969. He was succeeded by Mike Milonski.

A public service office, similar to those already existing in St. Louis and Kansas City, was established at Springfield in 1971. A bill passed the legislature that gave the Department rights to unclaimed islands and sandbars in the Missouri and Mississippi rivers, which later resulted in adding several thousand acres of public recreation lands.

In 1972, a Shell Knob man began a campaign to outlaw the use of steel leghold traps in the state. He initiated a letter-writing campaign and ran advertisements in several newspapers. The Commission was flooded with letters, pro and con, and in 1973 it reaffirmed that trapping was the only practical way to control certain animal species and that its practice would continue.

In June of that year, the Commission adopted an equal employment policy: "The Conservation Commission believes in the principle and practice of equal employment opportunity. Furthermore, it intends to continue to comply with the letter and spirit of federal, state and local laws prohibiting discrimination on the basis of race, creed, color, religion, national origin, ancestry or sex. Therefore, the Department of Conservation will continue full implementation of a program of affirmative action designed to translate the Commission's beliefs into results."

The Commission employed two Missouri University professors to study hiring practices, salaries and classification structure to ascertain if any inadvertent discrimination was being practiced. The pair reported they could find no obvious bias.

However, in May, 1973, the Division of Employment Security kicked back an announcement for conservation agents on the grounds the height, weight and age requirements were biased. These were revised, but when two women applied they were told the job was limited to males. It wasn't until June 30, 1975 that Jill Cooper, the first woman conservation agent, was hired.

The biggest flap in employee relations came in 1974, when an outside expert devised a new classification and salary structure which was vigorously opposed by many employees. In October Noren noted that the proposed system might cause a break "in the fine cooperative spirit that has existed among all employees in the past." Eventually it was modified and adopted, but not without a good deal of rancor. It has remained the system used by the Department and is now accepted practice.

In 1974, the "Game Division" was renamed the "Wildlife Division" to reflect the increased emphasis on non-game species management.

On June 22, 1974, Werner Otto Nagel died. Nagel was the first student to graduate in wildlife conservation from the University of Missouri and was one of the early biologists hired by the Department. He co-authored the monumental work, *A Survey of the Resident Game and Furbearers of Missouri*, that served as the basis for early Department programs. In 1970 the Department published his *Conservation Contrasts*, which described thirty years of non-political management of Missouri's wildlife and forests.

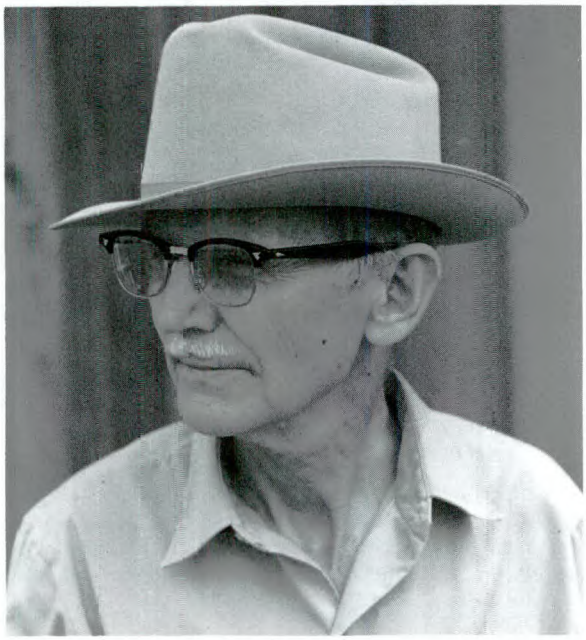
Also in that year, the conservation agents of the Department formed an association to "improve the agent's lot." Working through the administration, the association secured some measures to make the agents' jobs more efficient and effective.

In 1975, the legislature enacted a Missouri Register law that required the Commission to publish certain regulations proposals before final adoption. It fell to Associate Director Larry Gale, chairman of the Department's regulations committee, to put all rules into the new format. To involve field personnel more closely with regulations-making, the Commission authorized one person from each line division to attend regulations meetings.



In 1975, Jill Cooper became the first female conservation agent. She is congratulated here by Director Carl Noren.

Werner Otto Nagel, author, conservation philosopher and wildlife chef, died on June 22, 1974.



In November, 1975, the Commission named Osal B. Capps assistant director for legislative affairs, in addition to his duties as state forester. It was the first time the Commission had authorized a lobbyist for Department matters. The following year it promoted him to assistant director. His forestry duties went to Jerry J. Presley, the state's "third" state forester.

The moves were part of a reorganization planned by Noren to implement the *Design for Conservation.* Larry R. Gale was designated deputy director.

Assistant Director Paul G. Barnickol died of a heart attack June 7, 1976, after a career

spanning thirty-seven years with the Department. He started work as a fisheries biologist in 1939, rose to become superintendent of fisheries research, chief of Fisheries and assistant director. He was replaced by Mike C. Milonski. Allen Brohn continued as assistant director, with new responsibilities for much of the expanded program: land acquisition, organizing the new Natural History Section, and a greatly expanded planning effort. Later Charles A. Purkett Jr. was promoted from chief of Fisheries to one of the four assistant director positions. James P. Fry became Fisheries Division chief.

On June 4, a few days before Barnickol's death, Harold V. Terrill, the first biologist hired by the Department, died of an apparent heart attack. He had retired only one month before, after thirty-nine years of service.

Dean A. Murphy replaced Milonski as chief of the Wildlife Division, and the Field Service Section was transferred from Field Division to Wildlife. Education Section also was transferred from Field Division as a separate entity, and the Protection Section



Paul G. Barnickol was hired as a fisheries biologist in 1939. He went on to head the Fisheries Research program, served as chief of Fisheries from 1959–1964, and filled the postion of assistant director until his death in 1976.



Jerry J. Presley became the third state forester in 1976, filling the position vacated when Osal B. Capps was named assistant director.

became the Protection Division. An internal auditor, responsible only to the director and Commission, was established and Vernon E. Sievert was promoted to that post. Aaron R. Chapman was appointed to replace Sievert as fiscal officer, and Ronald E. Thoma was named head of a new Land Acquisition Unit.

A new Natural History Section was established and Assistant State Forester John E. Wylie was promoted to head it. Helene R. Miller became the Department's first woman professional forester.

Winter fishing for trout in the state parks was suggested by Mike Crocker and William Butts of the Trout Fishermen's Association and was approved by the Commission for 1977.

Also in 1977 there arose what came to be called the Lucian Smith Case, involving a farmer's rights to hunt land that he did not reside on. Regulations at the time permitted



Mike C. Milonski had a twenty-two year career with the Department. Hired as a biologist to manage the Busch Area, he rose to become Wildlife Division chief and assistant director.



Vernon E. Sievert went from Fiscal officer to fill the newly created internal auditor position in 1977.

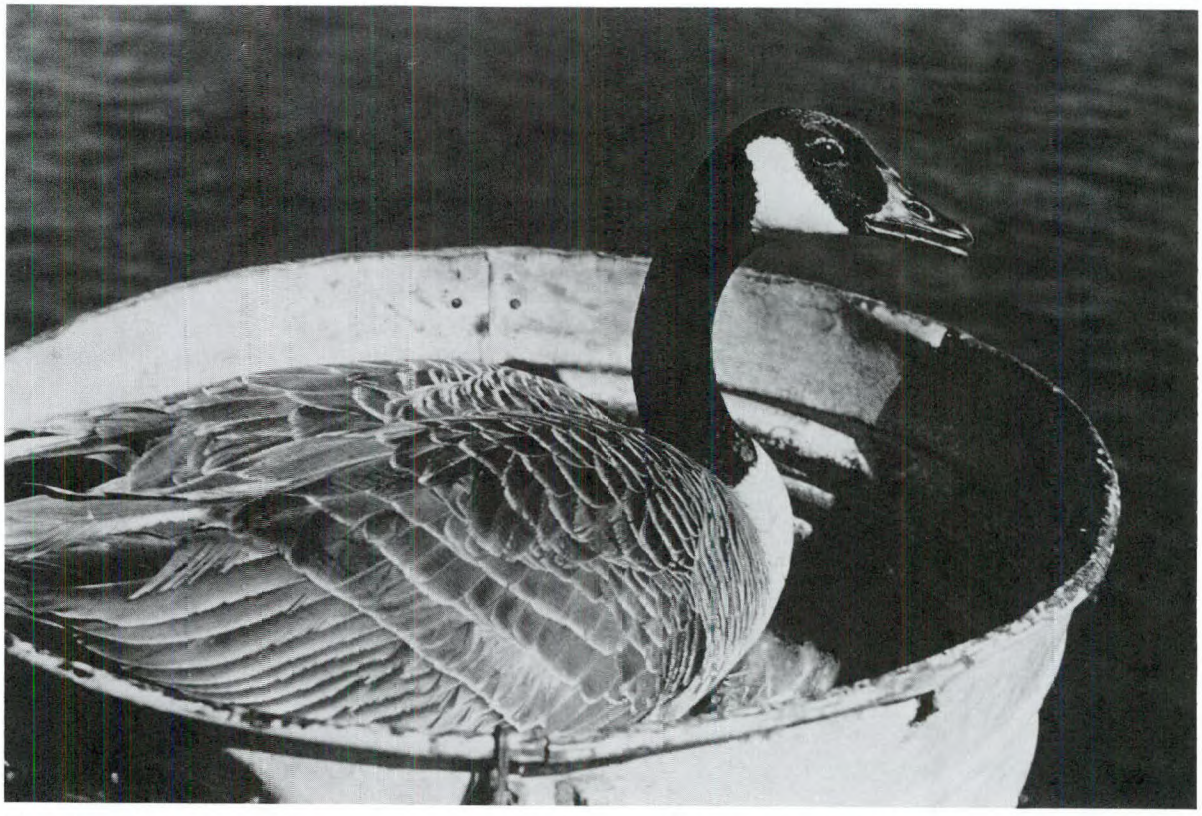
hunting without a permit only on lands where a farmer resided. Smith bulldozed out trees and wildlife cover on his farm to protest that rule. This regulation was later modified to be much more liberal, but for a year or two Lucian Smith and his protest grabbed a lot of headlines.

Immediately following passage of the conservation sales tax amendment a series of fourteen "town hall" meetings was conducted over the state to seek input from citizens about priorities for the *Design for Conservation.* These meetings showed that conservation education was uppermost in the minds of citizens, followed by a desire for the Department to vigorously pursue its program to acquire land for wildlife and forest recreation. As a follow-up to the meetings, the Commission formed a Citizens Advisory Committee, with each Commissioner appointing six advisors to serve as sounding boards for proposals under *Design.* Later, the director was authorized to name three at-large members.

There were problems with the new amendment that had to be ironed out. The tax brackets used by merchants to collect the sales tax established by the legislature had to be revised when citizens protested the amounts being charged. The Department of Revenue at first refused to collect the tax on vehicles and trailers, believing that the amendment did not apply to those items. A court ruling had to be sought to correct this. There also was a dispute over how much the Department of Revenue should be paid for processing the tax collection. In 1978, the Commission and Federation, with legislative and citizen help, had to turn back an attempt to repeal the amendment.

The use of steel shot for waterfowl hunting was ordered by the U. S. Fish and Wildlife Service in St. Charles County in 1977. This started a controversy that occupied the Department until 1987. A chief opponent was James E. Robertson of St. Joseph, who appeared before the Commission a number of times to argue against the use of steel shot for waterfowl.

The state's first fall turkey hunt was authorized for October 18–29, 1978, and formal approval was given to the Giant Canada Goose restoration project that year. In 1978,



The idea of introducing Canada geese to washtubs for nesting purposes led to the eventual restoration of the great bird to Missouri skies.

the Commission stipulated that all conservation agent applicants were required to possess a college degree in law enforcement, fish and game management, forestry or related biological science, thus bringing them to professional status within the Department.

Noren won the American Motors Conservation Award in April, 1978, for distinguished services to conservation. The previous year a Department fisheries biologist, Dr. William L. Pflieger, won it for his publication, *The Fishes of Missouri*. Also in 1978, the legislature passed a bill mandating that payments to counties in lieu of taxes for lands bought under the *Design* would be set by the legislature. The Commission decided not to oppose this bill, which had to be voted on by the people, but the Conservation Federation campaigned actively against it and it failed at the polls on November 7. A later bill enacted by the legislature, permitting the Conservation Commission to fix the payment rates, was passed by the citizens. By the end of December, 1978, lands purchased by the Commission under the *Design for Conservation* totaled 107 purchases of 51,724 acres in 55 counties, costing $27,039,848.

In July, 1975, Governor Bond appointed Robert E. Talbot to the Commission with the expiration of Harry Mills' term. He had originally been appointed the previous July, but his name had been withdrawn when it was apparent that his appointment would be contested when it went to the Senate for approval. Talbot did not serve a complete term, dying of a heart attack July 14, 1979.

Two years later, Governor Joseph Teasdale appointed two Kansas City businessmen to replace Blair and Delaney, whose second terms expired in June, 1977. They were W. Robert Aylward, vice-president of Aylward Products, a construction materials firm, and

J. Ernest Dunn Jr., president of J. E. Dunn Jr. and Associates, a construction firm. Aylward was from a prominent Kansas City family active in politics. Dunn was active in Ducks Unlimited.

Aylward, Dunn, Runge and Talbot composed the Conservation Commission when, in March, 1978, Noren notified them that he planned to retire in January, 1979. Recalling the difficulties surrounding his own appointment, he thought the Commission might want time to select a successor. Early action by the Commission would permit a smooth transition in the office. The Commission agreed and named Larry R. Gale as director-designate.

The Noren years were eventful ones for the Department. They were the years of an awakening conservation conscience among Missouri citizens—the years that embraced Earth Day, that saw a turn-around from high dam construction to stream preservation, that saw Missourians again show the rest of the nation that it intended to protect and fund its wildlife and forest resources with passage of the conservation sales tax. They were the years that saw the beginnings of the *Design for Conservation*, still in progress, that promises a better future for Missouri citizens in the outdoors. I. T. Bode had initiated and built a conservation program. William E. Towell had better organized and brought the staff together in its own headquarters. Carl R. Noren had stabilized its funding and put it on a path for the future.



As director, Carl R. Noren set out to the make the best conservation agency in the nation even better. Design for Conservation *was the result.*

The Gale Years



Larry Gale took the oath of office February 1, 1979, swearing to uphold the constitution and serve conservation. With the director are his wife, Norma, and Judge Ralph H. Duggins.

Carl Noren's last meeting with the Conservation Commission was January 19, 1979. The Commission expressed its appreciation for his services, not only as director but as a valued employee over thirty-eight years of service, and wished him well in his retirement.

The *Design for Conservation* program was Carl Noren's biggest contribution to the Department, but it has fallen to Larry R. Gale to carry it out, as he took over the reins on February 1, 1979.

Gale was born at Newport, Ohio, in 1921, descended from farmers and teachers on one side and three generations of country doctors on the other. The Gales were widely known as hunters, and he naturally took to hunting and fishing early. Gale likes to recount that the first birthday present he can recall was a Kentucky Walker foxhound named "Ging" after L. F. Gingery, Missouri publisher of the

Red Ranger Magazine. Squirrel hunting, fox chasing and bass fishing were Gale's favorite boyhood sports. He learned the practical side of forestry by spending high school weekends planting pine seedlings on a worn-out farm bought by his school advisor. One of his associates in that project was Ernest Gebhart, who later became state forester in Ohio.

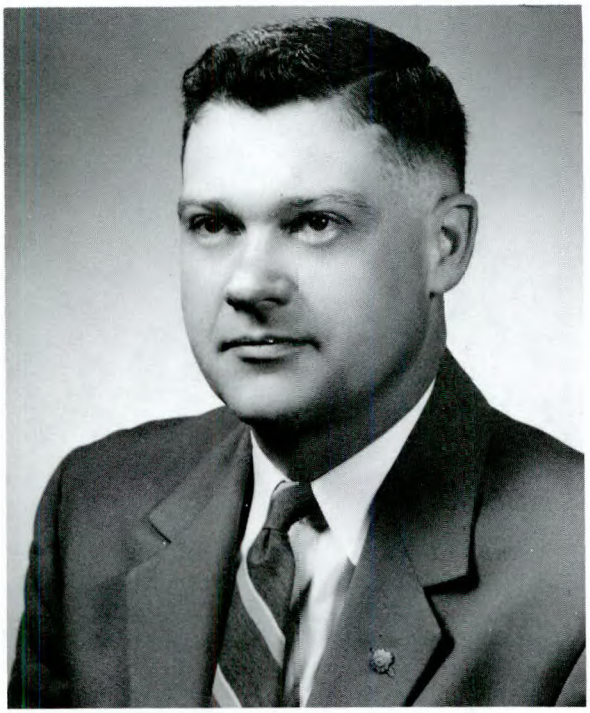
Gale received his bachelor's degree from Ohio University in 1942, working as a research assistant on the state's ruffed grouse project before and shortly after graduation. He enlisted in the Marine Corps that summer and landed with the 4th Marine Division at Roi-Namur, Saipan, Tinian and Iwo Jima, later retiring from the U. S. Marine Corps Reserve as a lieutenant colonel.

Following the war he re-entered Ohio University and received his master's degree in wildlife in 1947. He worked briefly for the Ohio Division of Wildlife as a wildlife extension agent. From late 1947 to 1949, he was a game biologist with the Kentucky Department of Fish and Wildlife Resources. From 1949 to 1956, he served as game director of that department.

In January, 1957, he became chief of the Fish and Game Division in the Missouri Department of Conservation, attracted to Missouri by the fine reputation built by Bode and Stephens. Fish and Game Chief Melvin O. Steen had resigned the previous June to become director in Nebraska and there had been considerable jockeying for position as his replacement. The obvious choices were Game Chief Paul Tulenko, Fisheries Chief George B. Herndon and Chief Engineer J. Warren Smith. But for one reason or another the Commission had decided to go outside the Department in selecting a new division chief.

Gale was given an initial interview September, 1956, in Toronto, Canada, at the same meeting that Bode tendered his resignation. In December, Gale was called to Jefferson City for another interview and then offered the job of Fish and Game Division chief, effective January 1, 1957.

William Towell was not named director until May, and the Commission asked him to re-submit Gale's application at that time, in line with the constitutional provisions.



Gale was initially resented as an "outsider" when he took over Fish and Game chief duties in 1957, but soon replaced resentment with respect.

There was some initial resentment to "outsider" Gale from within the Fish and Game Division, but he gradually overcame this. From Steen he had taken on a deer restoration program that was essentially completed. Turkey restoration was getting under way and it was assigned top priority. The coturnix quail introduction experiment was beginning to wind down as unsuccessful and was quickly terminated. Experiments with several strains of exotic pheasants in an attempt to find one strain that might flourish under Missouri conditions were initiated.

Earlier releases of ruffed grouse from Wisconsin had failed, but Gale arranged trades of Missouri wild turkeys for ruffed grouse from Ohio and Indiana and these were successful. Quail and rabbits still were abundant, but on the horizon were major changes in farming practices that would work against those species.

Fishing opportunities were expanding rapidly through construction of large reservoirs by the U. S. Corps of Engineers and



Restoration efforts for ruffed grouse got major attention in the 1960s. Populations in four counties north of the Missouri River were augmented by grouse obtained through trade with other states.

"community lakes" by the Department, as well as an agreement with the James Foundation to manage Maramec Spring as a trout park. Fish management experiments included commercial fishing at Lake Wappapello, stocking of striped bass, muskellunge and kokanee salmon, and establishing new creel and length limits on certain waters. These met with varying degrees of success, but they paved the way for future programs. These were the things that would occupy Gale as Division chief for the next seven years.

When Dan Saults resigned in 1964, Towell split the Fish and Game Division into separate divisions and promoted Gale to assistant director-line and Paul G. Barnickol assistant director-staff.

When Bill Towell resigned in 1967, Gale had been passed over as his replacement. According to two commissioners then serving, the Commission had become concerned over problems that might arise from others in the Department had they chosen Gale. They also wanted a completely different approach in administration, and felt Gale was too much like Towell in his methods. Gale naturally was disappointed and wondered if he had a future in the Department. He conferred with various commissioners who encouraged him to stay and, since he liked Missouri, he decided to make the best of the situation. He made a good alliance with Noren, and as assistant director took much of the day-to-day administration off his back so Noren could concentrate on his efforts to broaden programs and funding. As Gale puts it, "Carl fronted for the new programs and I ran the shop."

In 1969, Gale was named associate director, and Allen Brohn was named assistant director-line. Gale's title was changed in 1976 to deputy director, in line with terminology used in other state departments.

When Carl Noren announced his intention to retire the following year, the Commission named Gale director-designate in March, 1978, though this did not become official until October. By doing this, it allowed for an easy transition from one director to another, without the disruptive jockeying that sometimes precedes a change in administration.

According to Gale, each director has his own methods and brings a different background to the position. Bode established the Department and fought its early battles. Towell's tenure was one of consolidation and reorganization, with Game and Fisheries divisions becoming more prominent under his administration. Noren brought broader programming and funding to all Department programs, and Gale saw his job as primarily one of implementing the *Design for Conservation*. All directors must worry about adequate funding to meet the public's demands for services, and all must strive to retain the Commission's basic authority.

The *Design for Conservation* program was Gale's chief inheritance from Noren, and a good start had already been made since it became operative in July, 1977. Land acquisition for recreation, forestry and rare and endangered species protection was a major portion of *Design*. Some 51,724 acres in land purchases had been made when Gale took over the reins. Most service areas of the De-

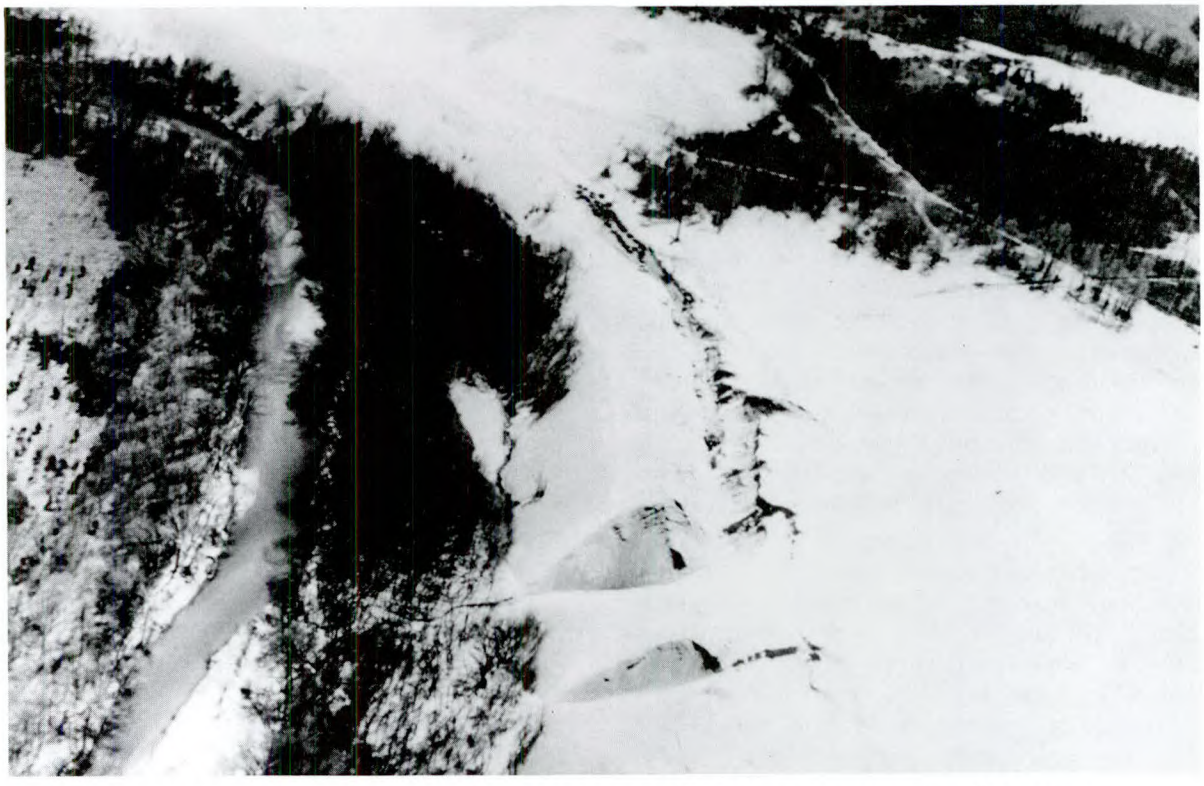
partment had been broadened or strengthened: thirty new conservation agents were in the field; a new Natural History Section was created; the Conservation Education staff doubled and a new elementary school and outdoor skills program were begun, along with many other changes. The Department staff had grown to carry out the expanded programs and the budget almost doubled.[1]

But a director inherits troubles, too. Looming on Gale's horizon was the steel shot for waterfowl issue which had begun in 1977, the problem with Truman Dam fish kills which began in 1978 and rapidly became worse, agitation over a new state waterfowl stamp, differences with the Division of Parks, and pollution problems on Big River.

Sometime in the summer of 1977, heavy rains in the watershed of Big River caused a lead mine tailings pile to pour what was estimated at 100,000 cubic yards of white, floury tailings into the river. Investigation showed that over thirty miles of Big River were affected by the pollution. In the months following, continued erosion of the tailings pile poured more pollutants into the river.

The entire Big River area, flowing as it does through the Missouri mining area, has a sordid history of pollution from many sources, and not only from mining operations.

It was learned that the tailings pile had been formed in lead mining by St. Joe Minerals Corporation over many years and that it covered some five hundred acres in a bend of Big River. When the mining company maintained the tailings pile it kept a dike built of the stuff to hold run-off water, with high water outlet pipes. In 1972, the minerals company conveyed the surface rights to the tailings pile to the St. Francois County Court, which had in turn conveyed it to the St. Francois County Environmental Corporation for use as a solid



Tailings from lead mine operations poured into Big River in 1977 when rains caused a dike to break.

[1] For example, the first urban biologist, Joe Werner, and the first urban forester, Bruce G. Vawter, were employed.

waste disposal site. That corporation allowed the overflow pipes to become clogged and when heavy rains fell, a breach occurred in the dike, creating the erosion problem. Four-wheel drive vehicle traffic on the dike and elsewhere on the tailings pile aggravated the situation.

No direct fish kill was attributed to the pollution, but the river bed had become choked with silt, and bottom dwelling organisms in the river's food chain had been killed or otherwise affected for thirty-one miles downstream.

Neither the St. Francois County Court nor the Environmental Corporation had funds to repair the breach, and the minerals company disclaimed any responsibility since it had conveyed the tract to the county.

Then began months of negotiation, with the Department of Conservation, the Department of Natural Resources, Governor Joseph Teasdale, the attorney general, the St. Francois County Court, St. Joe Minerals Corporation, the U. S. Fish and Wildlife Service, the U. S. Army Corps of Engineers, the University of Missouri and even the federal Environmental Protection Agency getting into the act.

Commissioner Robert Aylward especially was concerned about degradation of a fine Ozark smallmouth bass stream and the Commission ordered the staff to take what steps it could to save the stream. Director Gale appointed a special task force to work on the problem from the Department's angle. Department biologists monitored the stream and charted the effects of the silt on the flora and fauna, ascertaining what was needed to restore the structure and prevent further damage.

In cases of pollution, the Department of Conservation is not the primary state agency. That responsibility falls to the Department of Natural Resources, which is the regulatory agency in water pollution matters. Where fish kills occur, personnel of the DOC usually are the first on the scene. An established procedure has been worked out involving both state agencies and sometimes the federal Environmental Protection Agency and the U. S. Corps of Engineers. The DOC has a water quality unit second to none within the Fisheries Division, and conservation agents play a major role in initial investigations and reporting, but legal actions and most negotiations must be undertaken by the DNR. Even though Commissioner Aylward urged the staff to save the stream, there were limits to what it could do.

It wasn't until late 1980 that Governor Teasdale issued a news release stating the St. Joe Minerals Corporation had agreed to pay for repairing the tailings pile. It agreed to restore the breaches in the dike, drainage contours and berms, and to establish vegetation to prevent further wind and water erosion. In return, the departments of Conservation and Natural Resources agreed not to bring suit for damages. The present landowner was required to maintain the drainage structure to prevent the problem from recurring.

Although St. Joe Minerals attempted the repairs, conditions are still poor in that stretch of the river. Vegetation attempts have largely failed. The dike broke in another place following the first repair, and silt continues periodically to enter the river. Big River remains a seriously degraded stream, and the major problem facing Missourians on this and similar pollution incidents is lack of an overall system for dealing with such matters.

To make matters worse, in September, 1980, the Department issued a joint news release with the State Division of Health warning that fish in that section of stream showed higher-than-normal concentrations of lead in their tissues. This was especially true of black redhorse suckers. Citizens were discouraged from eating large quantities of such fish from the river. A direct link between the silt pollution and high lead concentrations in fish has never been made, but the indications are there.

The controversy over use of steel shot for waterfowl hunting is a case history of how politics can intrude into a biological matter, to the detriment of the resource. The issue began in 1976, when the U. S. Fish and Wildlife Service proposed to phase in steel shot use for waterfowl hunting, beginning on selected areas in 1977.

The Service's proposal was based on many years of study that conclusively showed ingestion of lead shot pellets by waterfowl



Waterfowl mortality studies conducted by the U. S. Fish and Wildlife Service and other agencies concluded that a significant number of waterfowl deaths were caused by ingestion of lead shot. In 1976, the Service proposed replacing lead shot with steel shot. The issue provoked a flurry of controversy for ten more years, when the Service reiterated regulations to phase in steel shot over a five-year period.

was a significant cause of death. There was some dispute as to exactly how much lead shot contributed to total waterfowl mortality, but no questioning the fact that it was killing ducks. On areas where tons of lead shot have been deposited by hunters over many years, ducks pick up lead pellets in their feeding that eventually cause their death from lead poisoning.

Over the years, ammunition manufacturers had experimented with other materials to replace lead shot, but it wasn't until the 1970s that a steel shot pellet was developed that showed promise. Steel could safely be ingested by ducks. However, there were ballistic differences between steel and lead shot.

Steel did not perform in flight like lead shot. It flew faster and held a tighter group, since there was no deformation of the pellets to cause "fliers." It had a shorter "shot string" and its striking energy was less than that of a lead pellet of the same size. All these things could be overcome by learning to shoot differently and using larger size pellets.

On the negative side, there was some deformation of gun barrels, especially tightly choked barrels, and some erosion of soft steel barrels. The price of steel shot was initially about double that of lead shot shells. Steel shot was not available in many places in a variety of loads to meet all demands. All these objections were met over the next few years, as steel shot manufacturing became more efficient and special shells and wads were developed. The price declined slightly, and lead shot costs rose until their prices became roughly similar.

So why the problem? The problem was politics. Many old-time hunters objected to the new demands being placed on them.

They feared for treasured old guns. They objected to the price of steel shells. They couldn't get the hang of learning new shooting techniques. They claimed steel shot crippled and caused the deaths of at least as many waterfowl as died of lead poisoning, and they found an occasional biologist who would champion their cause. There was no lack of politicians willing to espouse their cause if it looked like there were votes in it.

The first year, 1977, the Fish and Wildlife Service mandated the use of steel shot for hunting waterfowl in St. Charles County. Immediately the cry went up, arguing against steel shot efficiency, and claiming the extent of lead poisoning as a mortality factor was exaggerated. Duck hunting clubs sent their representatives to the Conservation Commission to voice their opposition to steel shot. Nevertheless, the Commission expanded the steel shot areas to five zones the next year, at the urging of their own biologists and the Fish and Wildlife Service. The controversy continued to rage.

Hunters in southern states appealed to their congressmen to save them from the dread steel shot, and political pressures began to be applied to the Fish and Wildlife Service. In 1979, Senator Ted Stevens of Alaska (a state far removed from the steel shot controversy but with its own differences with the Department of the Interior) tacked on an amendment to the Fish and Wildlife Service's funding appropriation that effectively forbid use of the money to enforce any steel shot regulation unless individual states concurred. Southern states, of course, did not concur and other states—like Missouri, willing to enforce steel shot regulations—found themselves penalizing their own hunters. Nevertheless, in August, 1979, the Commission voted to keep Missouri in the steel shot enforcement picture, Dunn and Runge supporting and Aylward against. Commissioner Robert Talbot had died a month earlier and had not yet been replaced.[2]

In July, 1979, the Commission approved a test of steel shot versus lead shot to be conducted that fall at Schell-Osage Wildlife Area. The results showed conclusively that hunters using steel shot did as well as hunters using lead shot, though neither group knew what types of shells they were using.

In February, 1980, Wildlife Division Chief Dean Murphy reported to the Commission that thirty-three states were affected by the steel shot regulations—twenty-four states stayed with steel shot in certain zones, six states withdrew from enforcement, and three states modified their enforcement. The next month the Commission, under severe pressure from waterfowl hunters, rescinded the steel shot rules by a vote of three to one, Aylward, Waller and DiSalvo[3] favoring rescission and Dunn opposing.

Two months later in May, 1980, the Fish and Wildlife Service notified the Commission that if it did not vote to enforce steel shot regulations hunting would be closed in the vicinity of federal refuges, so the Commission reversed itself again and voted steel shot for Swan Lake zone, Upper Mississippi, and Mingo Unit in southeast Missouri.

In 1981, the Commission mandated steel shot for Montrose, Swan Lake, Fountain Grove, Marais Temps Clair, Duck Creek (and Mingo Unit), Schell-Osage, Ted Shanks, and Otter Slough wildlife areas. In ensuing years the steel shot controversy has raged all over the country, with the Missouri Commission waxing hot and cold on the issue. In general, commissioners Aylward and DiSalvo opposed steel shot, and Ernest Dunn staunchly supported its use.

The National Wildlife Federation finally brought suit against the Fish and Wildlife Service that resulted in a court decision essentially forcing the Service to again espouse steel shot because of secondary poisoning of bald eagles. The telling argument was that international migratory bird treaties and the Endangered Species Act required steps be taken to offset anything that might threaten eagles or waterfowl. The Service again pro-

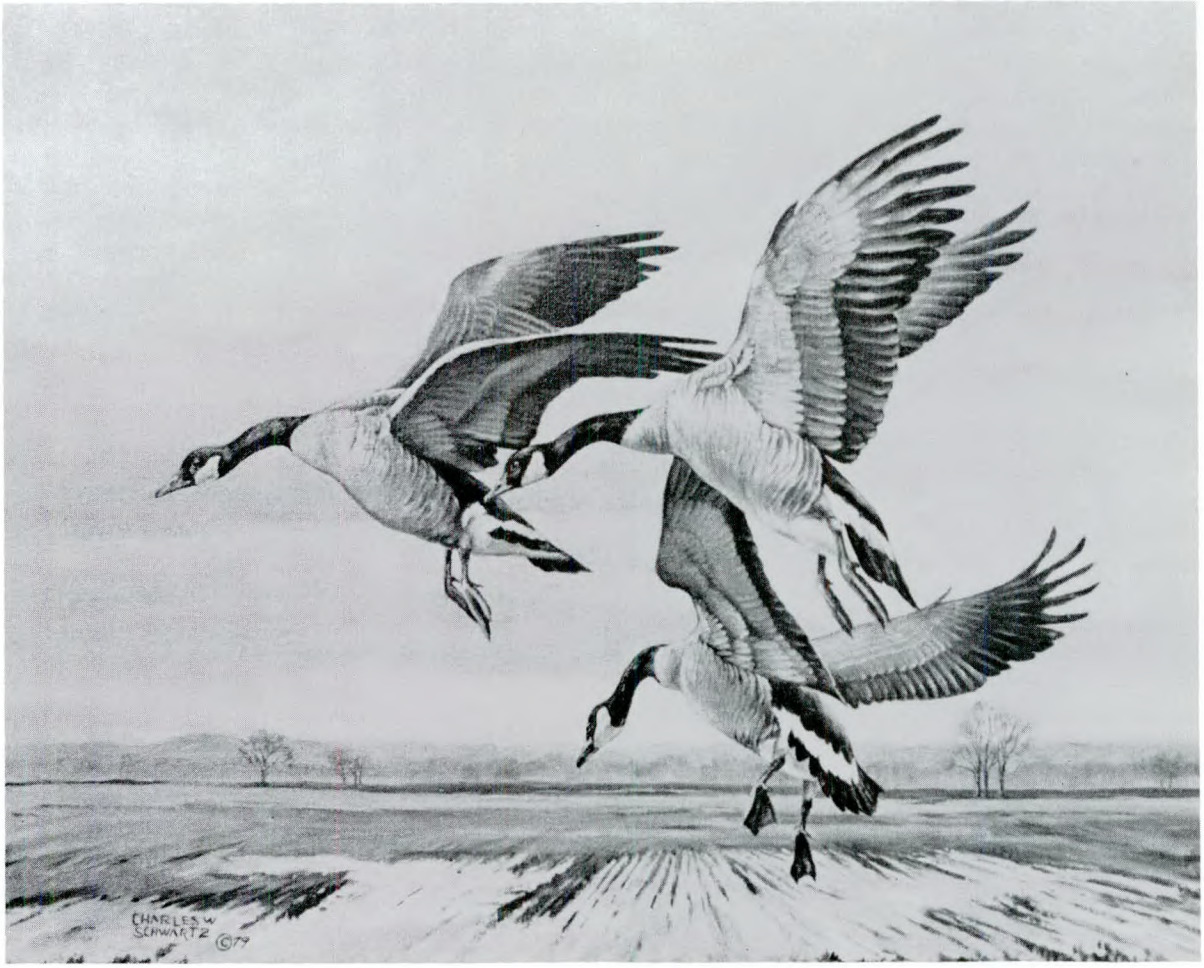
[2] Robert Talbot died July 14, 1979. Gov. Joseph Teasdale appointed Gordon F. "Jack" Waller, a Malden banker, to replace him on September 28.

[3] Carl DiSalvo, a St. Louis automobile dealer, was appointed by Gov. Joseph Teasdale on Oct. 11, 1979, to replace Andy Runge, whose term expired. DiSalvo changed his mind and supported the use of steel shot late in his term.

posed a rule phasing in the use of steel shot for all waterfowl hunting over a five-year period beginning in 1986. The Department found itself back where it was ten years ago, but in those ten years the controversy gave Director Gale and the Conservation Commission a lot of gray hairs.

The waterfowl question caused another flap during the same years. Back in 1972, the waterfowl committee of the Conservation Federation of Missouri issued a resolution requesting the Department to create a waterfowl hunting stamp similar to the federal duck stamp, with proceeds to be used to enhance waterfowl hunting in the state. At about the same time Ducks Unlimited had asked for such a stamp, also. The Commission was deeply involved in the *Design for Conservation* program then, and didn't want to tackle anything that might affect those efforts.

In May, 1978, and again in June, Ducks Unlimited proposed a duck stamp with the proceeds to be divided up between work here in Missouri and on DU projects in Canada. The Department's legal counsel told the Commission that he didn't believe it could use funds as proposed. However, in February, 1979, the Commission okayed a $3 duck stamp for the fall hunting season, with forty-five percent of the proceeds to be spent in Missouri, forty-five percent on contracted waterfowl projects in Canada that contributed



Proceeds from the first $3 waterfowl stamp, created by Charles Schwartz, were split between waterfowl projects in Missouri and Canada. Since the first stamp in 1979, funds have provided breeding, gathering, feeding and resting areas for waterfowl on their annual migratory routes.

to flights migrating through Missouri, and ten percent for administration of the program.

Immediately there was a hue and cry against the stamp. Some said that with the conservation sales tax the Department didn't need any additional revenue. The Conservation Federation's board opposed the stamp and its waterfowl committee reversed itself and also opposed it. The Commission's position was that the stamp affected only the waterfowl hunters and an earlier survey had shown them in favor of such a levy. It ordered another survey of hunters and three such surveys were actually conducted.

The first surveyed waterfowl hunters only and was conducted by the Department. Some sixty percent favored the new stamp. A telephone survey of hunters by the St. Louis public relations firm of Flieshman-Hillard Inc., showed essentially the same results. A survey of its members conducted by Ducks Unlimited showed that seventy-two percent favored the new stamp. On the strength of these surveys the Commission contracted with Ducks Unlimited for two water projects that could enhance duck flights into Missouri, the Bethel Project and the Two-Mile Chain Project, both in southern Manitoba. These cost $73,280. Ducks Unlimited has since completed the $300,000 Tatagwa Project in southern Saskatchewan, and is funding another, the Upper Buffalo Pound Project, also in Saskatchewan.

Proceeds from waterfowl stamps are providing breeding and gathering sites for ducks that make their way to Missouri, and providing feeding and resting places for the birds when they get here. Missouri waterfowl stamps also have added to the treasury of waterfowl art, as prints from stamps help recognize Missouri artists and enrich the lives of their purchasers. It was one waterfowl flap with a happy ending.

Not long after Gale had been named director-designate, the Department received word of the largest recorded fish kill in Missouri history, below new Harry S Truman Dam. It was learned that about 421,000 fish of all species had been killed by what is called "gas bubble disease," or "pop-eye disease," a condition similar to the "bends" in humans. There were heavy rainfalls in the Osage Basin that spring, and a heavy volume of water passed over the Truman Dam spillways.

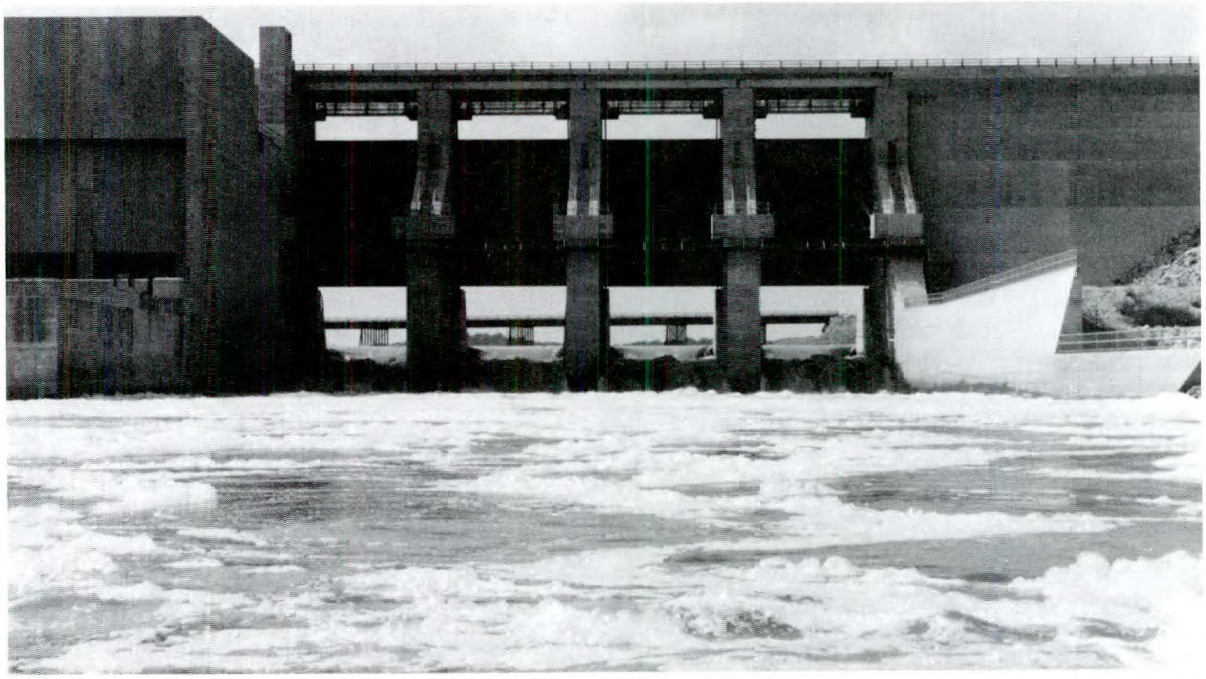
Below Truman Dam is a plunge pool some forty to sixty feet deep. The water plunging down at great velocity to those depths takes large volumes of air with it and as that water rises, it absorbs air to a degree of supersaturation—in cases as much as 130 to 145 percent above normal. The supersaturation is less likely to occur in shallow waters. Nitrogen gas—the same gas that gives divers the bends—causes the deadly effect. In fish it manifests itself in air blisters under the skin and in the veins, so badly in some cases that the fish's eyes bulge (hence, pop-eye disease) or it can cause hemorrhaging.

An estimated 68,000 fish died in a five-day period in early April, 1978. A larger kill, estimated at 302,000 fish, occurred in mid-May. Fifty miles of upper Lake of the Ozarks below Truman Dam had fish affected by the disease, and fish kills continued for some time after the second major kill. Fish that weren't killed outright by the disease often died of secondary causes within a short time.

Fish kills from gas bubble disease were well known in the Pacific northwest, where Columbia River dams had experienced them years before. The solution there was to create what was called a "flip lip," a device to keep the water from plunging deeply into the pool below the dam by shooting it out horizontally across the surface. The Corps built a flip lip at Truman Dam that became operative in the spring of 1980—then another fish kill was reported. Large paddlefish were being found dead or dying below Truman Dam, all exhibiting signs of physical damage, like bills, heads or lower jaws torn off. In all, 571 large paddlefish totaling 15,000 pounds were found.

Apparently, water hitting the flip lip jetted outward with such force that it physically damaged any fish that were close to it. The supersaturation problem was reduced, only to create another problem.

In August, 1980, yet another fish kill occurred, this time as part of a process the Corps calls "dewatering." Deep in the dam are openings for water to pass through to turn the turbines that generate electricity. These dark "caverns" are attractive to fish, especially to large catfish. When it becomes necessary to repair one of the six turbines in

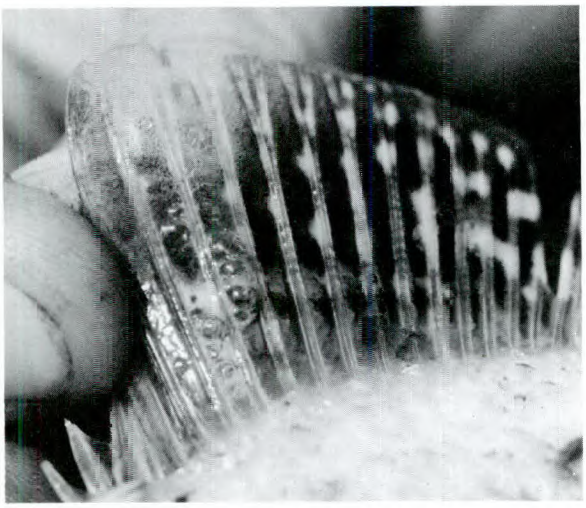


Water plunging over Truman Dam in 1978-79 killed an estimated 791,000 fish from a phenomenon similar to the "bends" that affects divers. The foam on the water's surface is an indication that the water is super-saturated with air, caused by plunging at great velocity over the spillway. The Corps of Engineers has since constructed a "flip lip" to slow the flow.

Truman Dam, gates are lowered so no new water can enter the turbine shaft and the water is pumped out (dewatering) so workmen can go down to work on the turbines.

When this was done in 1980, it was discovered that at least 538 large catfish weighing some 3,000 pounds were trapped in the shafts. Efforts were made to lift the fish out and release them below the dam, but many of them died in the handling. Losses to dewatering operations occurred three times in 1981, and twice in 1982—each time causing the deaths of large fish that would have gladdened the heart of some angler. A way had to be found to get the fish out of the turbine shafts before dewatering, and to keep them out until the process was completed.

But that wasn't the end of the Truman Dam fish kills. One of the processes built into Truman Dam was a pump-back operation whereby water used to generate electricity is pumped back during off-hours to refill Truman Reservoir for the next generating session. When generating, water velocity could reach six feet per second downstream; when pump-back was needed it would cause the river to flow backwards three feet per second. The Corps of Engineers first tried the pump-back operation in April, 1982, using only two of the six units for three hours. Approximately 2,000 pounds of twelve different species of fish were sucked into the pumps and ground



Air bubbles beneath the skin and in the veins were a manifestation of "pop-eye" or "gas bubble disease."

up. Serious questions concerning the long-term effects on Lake of the Ozarks fishery resources were raised. Pumping was discontinued while plans were made for a year-long series of tests to determine possible damage to the fishery.

Only two of the year-long tests were conducted—in July and September, 1984. They caused such large fish kills that the implications for impacting the fish population of Lake of the Ozarks were obvious. The pumping was discontinued indefinitely. The Conservation Commission, upon hearing of the September fish kills, called for a cessation of all pumping.

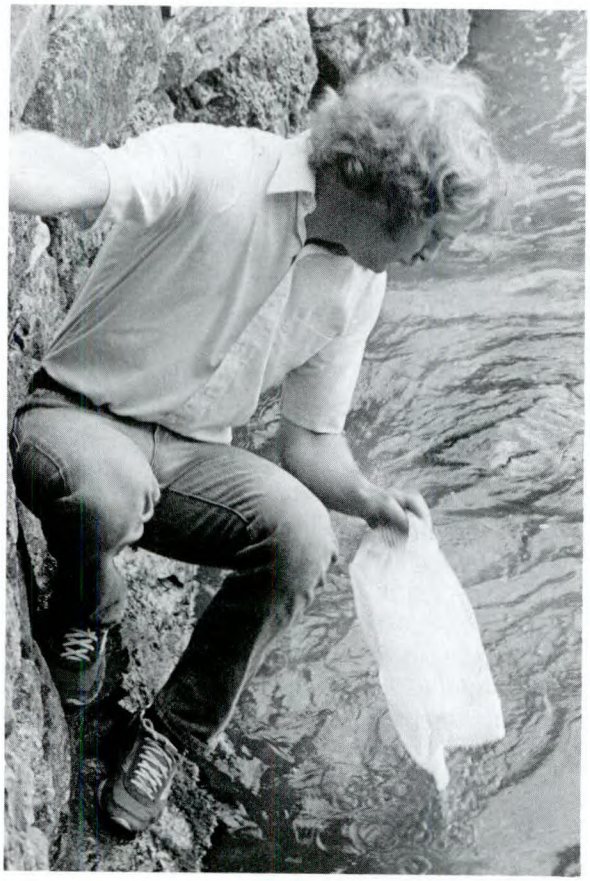
Environmental Services Supervisor William H. Dieffenbach reported documentation of ten separate fish kills at Truman Dam since the first one occurred in 1978. The Corps of Engineers has been in the middle of controversy ever since impoundment began. Its job was to build and operate the dam, but obligations to provide electricity to the Southwest Power Administration put the Corps at odds with resource managers and the public values of Lake of the Ozarks. Some of the problems have been at least partially solved, but most remain and have been the source of endless negotiations between the agencies involved.

Yet another water quality problem arose when a pipeline owned by the Williams Pipeline Company broke on November 14, 1981, spilling liquid fertilizer into Dry Creek in Phelps County.

Although the break was twelve miles south of Maramec Spring, in about ten days the pollutant began to appear there. Rare specimens of blind cave fish, albino crayfish and salamanders came up from the depths of the spring and were rescued by Department personnel. These were taken to Bennett Spring Hatchery, the St. Louis Zoo, and the Fish and Wildlife Research Center in Columbia for safe keeping. Trout at the Maramec Spring Hatchery had to be rounded up and trucked to other hatcheries until water conditions improved at Maramec.

The pipeline company repaired the break, but it wasn't until the following February, 1982, that it was possible to restock the spring with the rare blind cave fish, crayfish and salamanders, and resume normal hatchery operations. The pipeline company paid $115,000 in fines and damages for the incident.[4]

Differences and problems with the Division of Parks arose in Gale's administration, as they did under William Towell's. One issue that caused friction for years was the status of certain areas purchased by hunting and fishing license funds under the old Fish and Game Department.



Ron Crunkilton returns blind cavefish and crayfish to Maramec Spring in 1982 after pollution from a broken fertilizer pipeline abated.

In 1917, five percent of Fish and Game Department funds was ordered set aside by the legislature for purchase of state parks. This

[4] The pipeline was an old one and subject to frequent problems. It has since been abandoned by the company.

was later increased to twenty-five percent, and most of the major state parks were acquired with funds from hunting and fishing license sales.

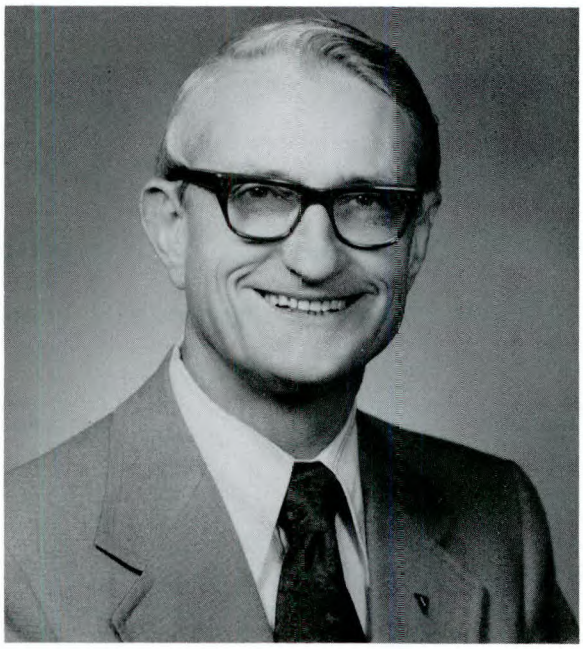
When the new Conservation Commission came into being, lands customarily used as parks were given to the State Park Board and the remainder were considered Conservation Commission lands for wildlife and forestry purposes. Although these assignments of land were generally accepted, doubt and controversy remained, especially concerning lands at Sam A. Baker and Meramec state parks, which had been jointly administered over the years. Parts of both areas were operated by the State Park Board and a portion of each was considered state forest, administered by the Department of Conservation.

DNR Director Fred Lafser told the Commission that ownership of Sam Baker, Indian Trail, Meramec, Deer Run, Chesapeake and Sequiota was in doubt, but that he felt the State Park Board had special claims on Sam Baker and Meramec.

In 1980, the Commission determined that ownership of the two areas should be resolved and directed Gale to negotiate the matter with Lafser. The outcome, later ratified by legislative action in 1981-82, was that the Conservation Commission abandoned its claim to Sam Baker State Park and the DNR deeded its interest in what had been Meramec State Forest to the Conservation Commission. Title to Indian Trail, Deer Run, Painted Rock and Cardareva state forests was cleared to the Commission as well.

A much stickier situation arose between the two departments in the early 1980s as a result of pressure for funding of state parks. Conditions in the state parks had deteriorated because of loss of federal funding without any increased appropriations by a legislature grappling with other financial problems. The conservation sales tax passed by the voters in 1976 made the Department of Conservation one of the few agencies in state government not pressed for funds in the face of rising demands by the public. The conservation funds looked inviting to hard-pressed legislators seeking money for many state programs.

In January, 1980, a House Joint Resolution was introduced to divert one-half of the conservation sales tax monies to the Division of Parks. Legislators claimed that voters in 1976 had thought they were passing an amendment to fund the state parks, as well as conservation programs. This was a convenient "thought" on their part, but utterly untrue, as the amendment contained not one reference to parks and petitioners had plainly stated that the funds were meant to support the *Design for Conservation.* Legislators, however, continued to argue the point.



Osal B. Capps was legislative liaison during the controversy over funding for state parks.

Assistant Director Osal B. Capps, who also served as legislative liaison, proposed to the Commission an amendment transferring the parks to DOC administration as a response to the resolution. The Commission advised Capps to "proceed in a manner which he feels is in the best interest of the Department." Nothing resulted from that legislative session, but state park funding continued to be a lively issue.

In June, 1981, Senator Clarence H. Heflin appeared before the Commission to urge its support of a merger between the State Park Division and the Department. The Commission agreed that such a merger might be

in the best interests of Missouri citizens, but adequate funding was a problem. Commissioner Robert Aylward was especially sympathetic to state park funding problems and felt the Department ought to give some sort of financial assistance to the parks.

Because of Aylward's sympathetic attitude, park officials were encouraged to appeal for Department funds for various expenses at the trout parks. Director Larry Gale pointed out to them that the DOC already was spending $1 million annually in the trout parks, while getting back less than half that from daily trout tag sales.

In September, 1981, the Commission gave assent to a joint resolution proposed by Senator Heflin that would merge the Department and State Parks Division, and increase the state sales tax earmarked for conservation from one-eighth of one percent to two-tenths of one percent.

The Department of Natural Resources, which administers the Division of Parks, fiercely opposed transferring Parks to the DOC. As its director, Fred Lafser, put it: "In a regulatory agency such as this, Parks is our 'white hat' agency."[5]

The proposal to merge state parks with Conservation was not universally accepted, and the Conservation Federation especially was opposed to any merger unless adequate funding came with it. Its executive director, Ed Stegner, said, "The people of Missouri voted that conservation sales tax for wildlife and forestry, not for state parks. We oppose any siphoning off of that money for purposes other than the people intended."

The Commission ordered a survey of the Citizens Advisory Committee to determine members' views on financial support of state parks by the Department. They were slightly more favorably inclined than the Federation's board of directors, but there was considerable difference of opinion in both groups, and no consensus was reached.

When the legislature met in January, 1982, Gale reported to the Commission that several resolutions and bills were introduced to transfer different agencies to the Department of Conservation, and/or to divert portions of the conservation sales tax monies for other purposes. One bill would simply transfer the state parks to Conservation without any additional funding. Gale said a study showed that without additional funding, in less than ten years the conservation fund would be exhausted, even without any further land acquisition under the *Design for Conservation* plan.

In February the Commission issued a statement outlining these facts, but said that it would abide by the will of the people if the matter came to a vote. This caused a rift with the Conservation Federation, which issued its own statement opposing any change in DOC funding.

Stegner complained that the Commission position was unclear: did it support taking over state parks without additional funding or not? The Commission replied that its position was very clear: it would abide by the will of the people.[6]

However, the Commission at last decided that it should oppose any constitutional changes that would curtail the *Design* program, approved by the voters in 1976, and issued a statement to that effect in March, 1982. The decision was hailed by the Federation and at last gave some guidance to people who were anxious to support the Conservation Commission but confused by the earlier position statement.

In April, DNR Director Fred Lafser and two legislators urged the Commission to accept a proposal from Governor Bond's staff, as a means of heading off legislation that would have merged state parks with the DOC, or that would divert funds from the conservation sales tax to state parks and soil conservation. This proposal was for the Commission to double the daily trout fishing fee in the state parks and give the additional funds to

[5] DNR people greatly feared that if the Division of Parks was taken over by the Conservation Department, many would lose their jobs. They actively campaigned against any merger.

[6] Federation Director Ed Stegner insists that in October, 1981, the Commission had agreed that it would oppose any merger with Parks without adequate, separate funding. Thus, to him the Commission's statement was a switch from that position.



Conservation Federation Director Ed Stegner opposed any move to merge state parks with the Department unless additional funding was included.

parks' administration. It asked for $3 million from the conservation fund for soil conservation work by DNR, and suggested the Commission buy a portion of Lake of the Ozarks State Park from DNR for $12 million. The plan also suggested that the Conservation Commission purchase the Columbia Bottoms tract from the City of St. Louis.

The Commission countered by saying it opposed raising trout fees and giving $3 million for soil conservation. It was willing to buy a portion of Lake of the Ozarks State Park and Columbia Bottoms, but only at an appraised price. It said it would lend financial assistance to the parks if legal problems could be overcome. The Commission also offered to pay DNR for certain wildlife and forestry services it might render. The Governor's office and Lafser rejected the counter proposal and the Commission felt it had no further commitments to DNR.

An attempt was made in the legislature to appropriate $1 million from the conservation fund to DNR, but this was clearly illegal and disallowed. The legislative session ended without action to aid the parks, but with the conservation funds intact.

A year later, the Federation was able to secure passage of a proposal to increase the state sales tax for five years, with the additional funds earmarked for state parks and soil conservation. This was supported by the Conservation Commission and was passed by the voters in 1984. Thus ended the matter, but there were hard feelings for a time among members of both DNR and DOC, a matter of concern for both directors.

The *Design for Conservation* program will be ten years old in 1987. Progress has been right on target in the years since the program was begun. Land acquisition has reached the two-thirds point of that originally proposed. *Design* called for acquiring about 300,000 acres over twenty years, and by the end of November, 1986, the Commission had approved purchase of 221,397 acres in 106 counties involving 644 separate purchases at a total cost of $152,285,122. The Department acquired through gifts or donations an additional 5,566 acres. Breakdown by type of land acquired is fifty-four percent forested, twenty-four percent cropland, nineteen percent pasture and prairie and three percent marsh, lake and other.

When the conservation sales tax to fund the *Design for Conservation* program was passed, most opposition came from rural areas. Most rural people already had ready access to outdoor activities, so they did not feel the need. There was opposition, too, out of fear that the Department would have vast sums at hand to purchase property and would force farmers off their lands. The Commission had vowed not to resort to its powers of eminent domain, but that did little to allay farmer's fears. Spokesmen for farm interests, for various reasons, found it useful to whip up that fear.

Over the years there were claims the Department was forcing up the price of land, though land prices were inflated everywhere in the country in the late 1970s and early 1980s. In fact, at a Commission meeting in April, 1979, Director Gale told the Commission that it was unlikely that the Department would ever achieve the 300,000-acre goal it had set, because inflation dollars just wouldn't buy as much, and land prices were too high.



In behalf of the Department, Director Larry Gale accepts the Outdoor Writers of America "Mountain of Jade Award" from OWAA president Tom Opre in 1981. The Department received the award for the Design for Conservation *program; it was the first time the award had been presented to a state agency.*

When land prices began to fall in 1984-85, the possibility of reaching the original goal increased, but the Commission had already issued orders for gradual phasing in of the development/management part of the land program, and funds have been allocated increasingly to that activity.

Without having to resort to eminent domain, a great deal more land was offered to the Department for sale than it was possible to buy. From January 1, 1979, through October 31, 1986, (seven years and ten months) the Department received and reviewed 5,044 offers of land, totaling 2,286,633 acres (5.2 percent of the state) at a total asking price of $1,687,811,266.

The Department's purchases for the most part were at or below appraised values, so the claim that it was driving up land prices was without foundation. For large purchases, two different appraisals are sought, and prices are usually comparable to the going rate for similar lands.

There were other problems on the farm front. Multiflora rose, introduced by the Soil Conservation Service as a cheap fencing sub-

stitute in the 1930s, was becoming a problem in many areas. It was an excellent wildlife plant and Fish and Game Division Chief Melvin Steen had added it to the Department's arsenal of measures to increase wildlife in the 1940s. It did its job, but seeds being spread by songbirds into pastures became a problem. The Department had already stopped producing and making multiflora rose seedlings available about 1975. In response to appeals from the farming community and as a show of good will, the Department entered into efforts to control multiflora rose by use of Tordon herbicide in several counties.

Creation of an agriculture liaison post to improve communication between the Department and agricultural agencies and agri-business organizations, handled by Raymond D. Evans, has gone a long way to satisfy farmer critics of the Department. Other measures helpful to both wildlife and farming have been the Department's warm season grass programs and free services offered by Department personnel in farm planning for wildlife and forestry. The Department started two experimental farms—in Lawrence and Worth counties—that incorporate wildlife practices along with regular farming. They demonstrate how wildlife can be integrated into successful farming, to the benefit of both.

The Conservation Commission when Gale became Director was composed of Robert Aylward, J. Ernest Dunn Jr., G. Andy Runge and Robert E. Talbot.

Gordon F. "Jack" Waller of Malden replaced Talbot on September 28, 1979. Carl



Biologist Steve Clubine explains the advantages of native warm season grasses to farmers at one of the Department's demonstration farms.

DiSalvo of St. Louis replaced Runge October 11, 1979. Waller, who was serving out Talbot's term of twenty-one months, was replaced July 8, 1981, by Peter Myers of Mathews. He was a Bootheel farmer, active in several farm organizations and a member of the Conservation Federation. He served as commissioner only eleven months, when he went on to head the U. S. Soil Conservation Service in Washington.

John B. Mahaffey of Springfield was appointed by Governor Bond on May 1, 1982, to serve out Myer's term. He owns a 1,500-acre ranch in Christian County and several radio stations.

In July, 1983, the terms of Aylward and Dunn expired and they were replaced by Jeffrey Churan of Chillicothe and Richard T. Reed of East Prairie. Churan is a general contractor and regional vice-president of Ducks Unlimited. During the *Design for Conservation* campaign he served as a fund raiser for the Citizens Committee for Conservation. Richard Reed is president and chief executive officer of the First Bank of East Prairie.

In July, 1985, Carl DiSalvo's term expired and Governor John Ashcroft selected John Powell of Rolla to replace him. Powell is a lumber dealer and landowner, operates the Frank B. Powell Lumber Co., and supervises an 18,000-acre tree farm. He was named Forest Conservationist of the Year in 1968 by the Conservation Federation and was a founder and first president of the Missouri Forest Products Association. Powell was Governor Ashcroft's campaign manager and former chairman of the Missouri Republican Party.

The *Design for Conservation* program, now more properly the expanded conservation program of the Department, will be ten years old on the same date the Department completes its fiftieth year. It was passed by Missourians in 1976, and despite attempts by other states to pass something similar, Missouri remains alone in demonstrating its citizens' concerns for wildlife and forestry.

Harking back to Aldo Leopold's words in 1947: "*Conservation, at bottom, rests on the conviction that there are things in this world more important than dollar signs and ciphers. Many of these other things attach to the land, and to the life that is on it and in it. People who know these other things have been growing scarcer, but less so in Missouri than elsewhere. That is why conservation is possible here. If conservation can become a living reality, it can do so in Missouri. This is because Missourians, in my opinion, are not yet completely industrialized in mind and spirit, and I hope never will be.*"



Former Commissioner Peter C. Myers, a Bootheel farmer, served as commissioner for less than a year. He went on to pursue a career in Washington, D.C. in the U. S. Department of Agriculture.

A case could be made for those dollars and ciphers as to wildlife's value to Missouri. Resources Planner Daniel J. Witter determined in 1986 that for every dollar spent by the Fisheries and Wildlife Divisions of the Department, at least $62 came back into the Missouri economy. It is a bit more difficult to put a dollar value on hills once more covered with healthy timber, or clear, free-flowing streams, or just *seeing* a flock of wild turkeys as you drive through the state, but those are part of the accomplishments, also.

Leopold died the year after uttering the above-quoted remarks, and did not live to

see the edifice built by Stephens and the commissioners who followed him, and Bode and the directors who guided the Department from its first, halting years to what it has become today. But it was built on a base of those Missourians with *un*-industrialized minds.

Director Larry Gale, in his year's-end message to employees, wrote: "As we near the end of another year of achievement in conservation, this is a fitting time to think about where we are and where we are going. All of us have many reasons to be thankful. High among these is the privilege of our membership in the finest conservation agency in this best of all countries.

"As your Director, I am thankful for unselfish commissioners who are willing to listen, to weigh the facts in full consideration of public opinion and the needs of our fisheries, forests and wildlife, and to act decisively in establishing sound conservation policies.

"We are forever indebted to those public-spirited citizens whose vision and labors first established and have since guarded our constitutional authority and our unique source of funding. During the past year two other states have tried unsuccessfully to enact conservation sales taxes. We hope they will try again and succeed, but few other states enjoy the unusual combination of factors that made it possible in Missouri.

"With all these advantages, we have only ourselves to blame if we do not continue to show the way in fisheries, forestry and wildlife conservation. I am confident that we will meet the challenge. We have set new records this year, and we will set more in years to come.

"Much remains to be done. We have initiated Project Bobwhite, with a goal of restoring depleted habitat for quail and other upland wildlife. The quality of our waters, both surface and underground, must be improved or we'll find more and more streams and lakes where the fish are unsafe for human consumption even if they are able to survive. In some areas forests are declining from unknown causes. Poachers persist in spite of our determined efforts to educate or control them.

"Like all other problems, all of these present opportunities. We face the new year confident in our ability to find and carry out appropriate solutions."



Larry Gale led the Department through controversies and conundrums, but his greatest task, he believes, was implementing Design for Conservation *with the one-eighth cent sales tax revenue.*

Wildlife Division

The first attempt at wildlife management, begun in 1939, was the Cooperative Wildlife Management Program. The intent was for the handful of biologists to serve as extension agents for the Department and bring together the landowners and the sportsmen to put wildlife restoration measures on the land. There were chapters of the Conservation Federation in most counties and it was thought they could be encouraged to work with farmers to implement the recommendations of the wildlife biologists.

There were three aspects to the program: refuges, wildlife management and harvest. The refuges were initially to provide sanctuaries, but emphasis was shifting away from refuges to habitat improvement practices like leaving unharvested strips of grain bordering fields, leaving some strips uncultivated, permitting fence rows to grow up to weeds and brush, building ponds, controlling soil erosion and woods fires, keeping dogs penned during breeding season, eliminating cats and "harmful" hawks and protecting den trees. With the exception of eliminating cats and hawks, the same practices would work today.



Red-tailed hawks, once thought to be a serious predation threat to game animals, hang on a farmer's fence near Prairie Home in 1947. Farmers who were unaware of hawks' value in controlling rodent pests killed them in large numbers even though they were officially protected under the federal Migratory Bird Treaty Act.

A report in December, 1941, showed there were eighty-nine cooperative areas established, of which thirty-three were active, forty-seven passive and nine were deemed failures. It is interesting to note that cooperatives initiated by local sportsmen's clubs had the highest success rate—seventy percent active and ten percent passive. Those initiated by other county groups such as Rotary, Lions, 4-H, FFA and others had the poorest record—twenty-six percent active and sixty percent passive. Cooperatives initiated by landowners were only slightly better—twenty-eight percent active and sixty-three percent passive.

The landowners seized upon the refuge aspect of the program because they were anxious to control trespass and unsportsmanlike hunting. The sportsmen, concerned about gaining a place to hunt, preferred the habitat improvement aspects. The Department played down the refuges and urged habitat improvement and harvest by considerate sportsmen.

The war years saw the gradual decline of the program. Sportsmen and farmers alike were in service, as were many of the biologists. The only thing that remained was the pond part of the program. Farmers eagerly seized on pond building as a way to get water for livestock, recreation and domestic use. When federal programs helped with construction costs, the program really blossomed. The farm pond program, which today makes the Missouri landscape different from that of any other state, had its humble beginnings in a habitat improvement program for upland game.

The first biologists divided the state into four parts and were expected to promote wildlife management in their districts. In time, they came to also have statewide responsibilities—C. W. Schwartz for prairie chickens, D. L. Spencer, W. K. Clark and A. S. Leopold for deer and wild turkeys, C. R. Noren and Reed Twichell for furbearers and H. V. Terrill for waterfowl. A. H. Denney had a knack for synthesizing data. He led the way in soil studies in relation to wildlife and produced the state's—and nation's—first forest cover map.

The Department was deeply interested in large impoundment plans of the Corps of Engineers and Denney began the Meramec River watershed wildlife surveys that were ultimately completed by Bill Crawford. A similar survey was done of the Grand River Basin.

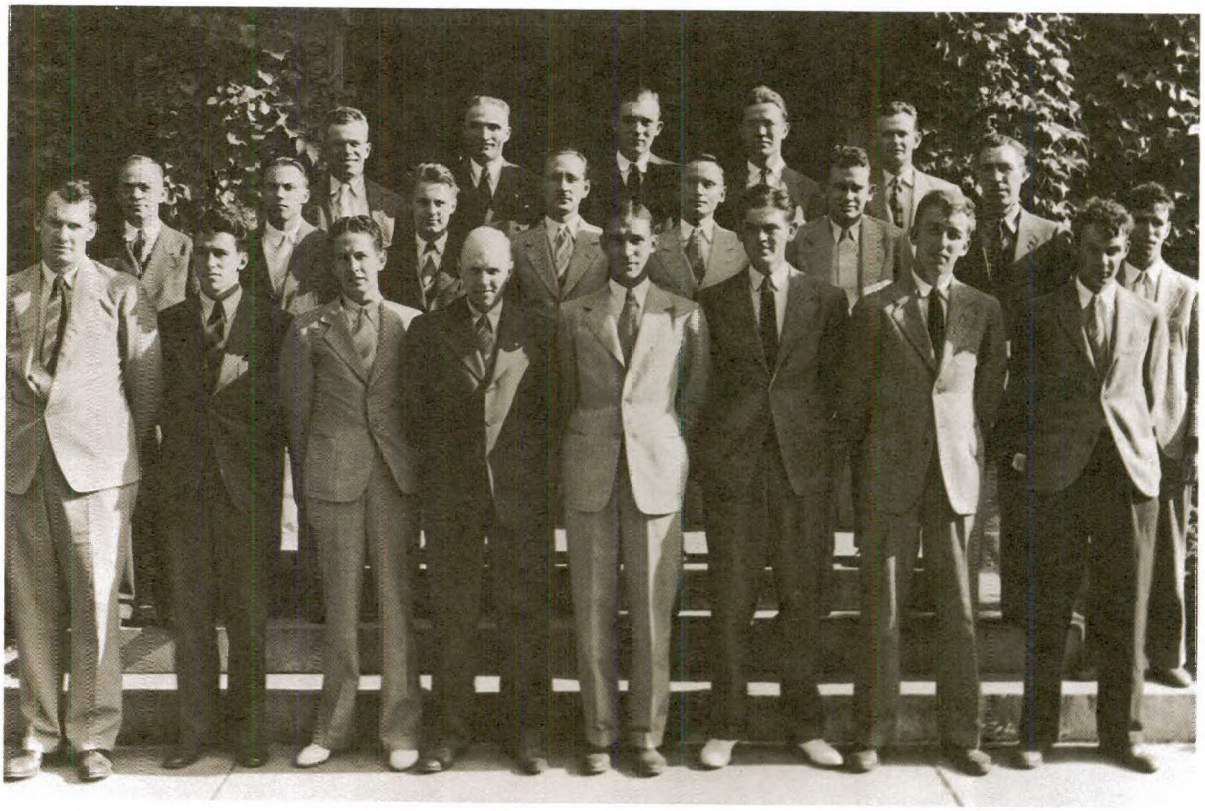
Following World War II, it became apparent that the most effective use of biologists was not in scattered districts, but centered in one place where they could work on specific problems. The Cooperative Wildlife Research Unit at the University of Missouri was a logical partner and research biologists were stationed in Columbia where they had access to laboratories, University personnel and libraries. Administrative biologists remained in Jefferson City as part of the Game Section, created in 1947.[1]

The field duties of the biologists—working with various groups to get wildlife practices applied to the land—were taken over by new specialists, the field service agents. First assigned to the Information Division, they were later transferred to the Fish and Game Division.

Bode felt the need for someone to work statewide to "sell" Department objectives to the Federation groups which had accomplished passage of Amendment 4 and now sought another task. He hired Wallace Gray to assist field men in promoting the cooperative wildlife management areas, conduct public meetings and to essentially engage in public relations.

By 1939, four field service agents had taken over the pond program, arranging for loans of the eighty-eight scrapers purchased by the Department, and working with other agencies involved in the program. The Farm Security Administration funded pipe and fittings for ponds, if they were fenced from livestock to improve conditions for wildlife, and this was an incentive to farmers. In 1942 the Department furnished these materials for 647 ponds and at the same time began providing food and cover plants for wildlife. By the end of the 1940s, construction of approved ponds had reached 1,000 per year. By 1943 there were six field service agents,

[1] Research chiefs have been Lisle Jeffrey (1941-1943), Paul Q. Tulenko (1943-1946), Maurice F. Baker (1947-1949), Bill T. Crawford (1949-1983), Oliver Torgerson since 1983.



Members of the Federal Aid, Field Service, Game and Refuge sections in 1940 were, front row, left to right: Lisle Jeffrey, David Spencer, Edgar Biffle, Glenn Pittenger, Starker Leopold, Willard Barbee, Charles Schwartz, Carl Noren; second row: H. E. Baggenstoss, Hugh Denney, Reed Twichell, Paul Tulenko, James Beets, Jr., Harold Terrill, R. G. Ranney, Webster Kim Clark; third row: Cecil Veatch, Wallace Gray, Jay Morrow, unknown (possibly Wilfred Case) and Bruce Lewis.

demand for their services was so heavy.

Meanwhile, the various habitat programs had grown, and better coordination of Departmental and public efforts was needed. In 1944, a separate Field Service Section was created with Jay B. Morrow as its chief, assigned to the Administrative Division.[2] The function of the new section, in addition to needed public relations work, included handling applications for game and fish management practices, assisting other personnel, and trouble-shooting when misunderstandings arose between different groups and the Department. Their efforts helped people understand the reasons for new policies and programs, eliciting voluntary participation by the public when needed.

To meet growing demands, the section grew to eleven full-time field men, one in each of seven districts, one each for Kansas City and St. Louis, one to work on the extension balanced farming and soil conservation district programs, and one on statewide assignment to improve areas around farm ponds and develop techniques to assure long life and multiple uses for these small impoundments.

With reorganization of the Department in 1947, the section was transferred from the Administrative Division to the newly-created Field Division, along with Protection. Kenneth R. Hicks became Field Service chief as Jay

[2] Field Service chiefs have been Jay B. Morrow (1944–47), Kenneth R. Hicks (1947–1955 and 1958–1974), Ray M. Wells (1955–1958), and Sam B. Kirby since 1975.



The Field Service Section, circa 1949. Front row, left to right: Otis C. Thorburn, Harry Bruton, Section Chief Kenneth R. Hicks, Richard H. Rotsch and Ray M. Wells. Back row: Leonard Rowe, J. Lewis Berrey, A. R. Mottesheard, Robert R. Bright, Fred Bickel, Ran C. Barrett and Cecil Davis.

Morrow became Field Division chief. It was about this time that field demonstrations began to be widely used, and this approach required coordination with other land management agencies. Field Service agents found themselves playing the role they still follow—coordinators with other agencies in soil and water management plans, as they became the base for wildlife habitat development.

Work with youth groups, like 4-H and FFA, resulted in wildlife conservation practices becoming approved activities within those organizations. In the 1950s, special projects were designed for FFA chapters. One of these, developed under sponsorship of the Sears Roebuck Foundation, was the first of its kind in the nation. A total of 103 chapter projects, each involving three to five acres, which included a pond and eroded area, were completed with the guidance of a Field Service agent. Work included summer youth camps and 4-H club meetings.

Also during the 1950s, the Field Service staff worked with the federal Production and Marketing Administration to bring about subsidy payments for creation of wildlife habitat. For the first time in Department history, all land management agencies gave uniform approval to practices the Department recommended in farm programs. Field Service redesigned its programs to promote wildlife programs through state and federal agricultural agencies, farm organizations, individual farmers and interested sportsmen's groups. Inter-agency work became the order of the day.

The Soil Bank program in 1956-57 opened another door. Field Service developed a relationship with the ASC (later ASCS, Agricultural Stabilization and Conservation Ser-



Early wildlife food and cover restoration programs leaned heavily on demonstration areas. Biologist Richard W. Vaught and his Ford tractor helped develop such areas.

vice) which resulted in subsidies for approved wildlife practices on acreages diverted from cropland to grasslands. Annual food plots which had to remain uncropped for ten years were planted extensively. In 1958, Field Service's work under the Soil Bank program won recognition as the nation's outstanding wildlife conservation extension program.

Wildlife management plans for individual farms became equally popular, and by 1960, field work became directed more to practical applications created by research biologists' findings.

In 1977, Field Service was transferred to the Wildlife Division, though it continued to be involved in some Fisheries work for a time. An extensive pilot Private Land Program project was begun in 1981, to document and evaluate the results of several program elements. Two demonstration farms were established to show how farm management practices produce economic returns, soil erosion control and wildlife benefits. Two specialists were assigned to incorporate wildlife in SCS "critical erosion control areas," and other



Field Service agents like Paul Jeffries worked with individual landowners interested in improving conditions for wildlife by providing them with management plans tailored to specific needs.

specialists worked on programs in three counties where intensive wildlife practices were promoted. An agricultural liaison position worked with state and national agricultural programs and policies full-time.

Beginning in 1986, guided by the evaluation of the five-year study program, several organizational changes occurred. The name of the section was changed from Field Service to Wildlife Services. Field Service agents became Wildlife Services biologists, and private land specialists were assigned to work directly with SCS to represent wildlife resources. A special native warm-season grass program, now expanded to a grassland management program, offers technical advice, equipment and services to Missouri farmers. Improved pastures translate into improved wildlife habitat.

Wildlife Services biologists continue to apply biological principles to land management, and to coordinate Department programs with other agencies. They prepare individual management plans, provide technical advice, seed and nursery stock, and evaluate wildlife habitat conditions on private land. They conduct short courses to show landowners how to plant trees and shrubs properly, how to improve pastures and cropland for wildlife, and generally how to improve habitat without lowering farm income. In a typical year, Wildlife Services biologists administer the Planning Ahead for Wildlife Survival (PAWS) program through conservation agents, involving 12,665 cooperators on 6,298 farms. Nearly eighty-nine tons of seed, 1.2 million plants and 2,700 special bundles are allotted to cooperators for an estimated 16,030 acres of land. Wildlife Services biologists continue to do camp work, conduct youth and adult meetings and handle public relations problems.

Working closely with the SCS and coordinating efforts with the Wildlife Services biologists, the private land specialists work with more than 150 SCS employees, helping them improve thousands of acres of farm land for quail and other wildlife, as side benefits to farming. They train SCS personnel to conduct wildlife habitat appraisals and to correctly use that information to improve wildlife habitat. They help SCS organize and implement public information programs and assist with exhibits, tours, demonstrations, news articles, publications, radio and television programs.



Promotion of native warm-season grasses is a major aspect of the Department's habitat improvement program. Biologist Randy Arndt stands by a sign at the Seat Demonstration Farm in Worth County.

The extension wildlife damage control program begun in 1945 is now a part of Wildlife Services. This popular program teaches landowners how to control nuisance animals, from blackbirds to deer.

The traditional responsibility for small impoundment management was transferred to the Fisheries Division to focus more staff time on non-aquatic wildlife programs for private lands. Even with the transfer of Fisheries duties, the reorganized Wildlife Services Section represents a wide spectrum of direct and indirect services to Missouri landowners and related agricultural agencies.

Meanwhile, both the general and special-subject biologists had been pulled into Columbia to work on projects needed for program development. It was the organizational basis of what was to become the Wildlife Research Section. First quartered in the University's

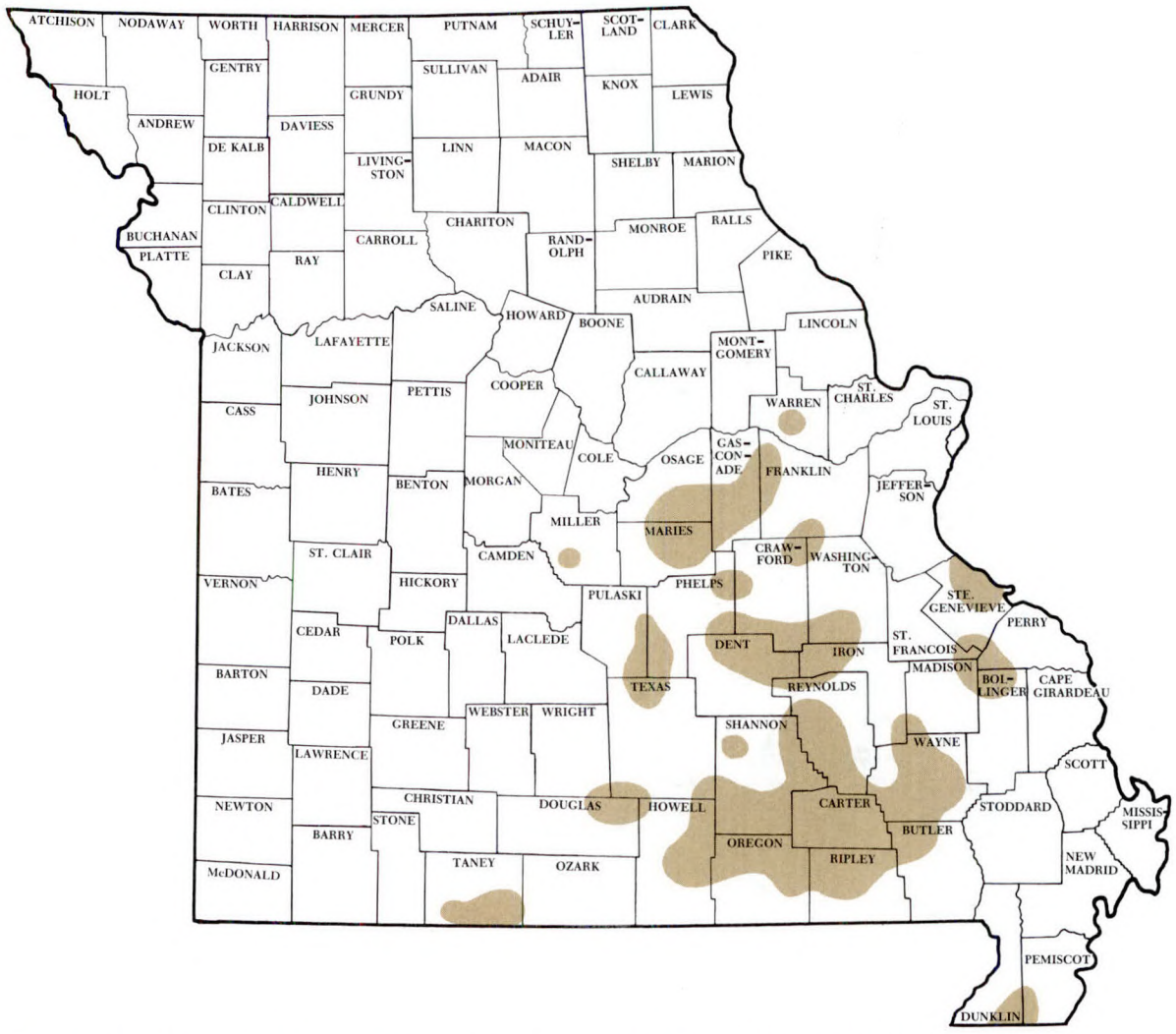


Deer restoration was beginning to show results when this 1946 photograph was taken at Eleven Point Refuge in Oregon County. Estimated deer populations grew from 5,000 in 1939 to 15,000 in 1944. Deer Biologist Dunbar Robb is in the back row on the extreme right; early researcher Dr. Paul Dalke is in the front row on the extreme left.

Wildlife Conservation Building (Stephens Hall), they later occupied rented quarters elsewhere in Columbia until, in 1970, they at last moved to the Fish and Wildlife Research Center, built by the Department to house their offices and laboratories. Their jobs were to get the facts upon which wildlife management might be based, although at first the distinction between research and management was often blurred. There was so much to be done that they tended to work on the more obvious, immediate and less complicated problems.

In the period before World War II, major research efforts concentrated on deer and wild turkey restoration. The deer program consisted of developing refuges where fertilizing of food plots, predator control, protection from fire, grazing and poaching were used to increase animal production. Deer responded dramatically. Studies of soil in its relation to wildlife showed that animals on better soils were larger, bigger-boned and produced more healthy young than those on poorer soils. Deer were live-trapped and released on areas where local conditions promised their survival. Protection by the increasingly efficient conservation agents, gradual suppression of wild fires, better timber management, grazing control, and cooperation by local people were important factors in deer restoration.

This program progressed so well that biologists recommended having an open season in 1944—deer hunting had been closed following the 1937 season. Agents' estimates of deer numbers in 1939 had been about 5,000 animals; in 1944 they estimated 15,000 deer as a result of restoration efforts. A two-day buck season in twenty counties resulted in a legal kill of 519 deer by 7,557 resident hunters. From then on progress mushroomed. By 1950, a six-day season in fifty counties



A map of the deer range in 1934 shows isolated pockets of deer in a few remote areas of the state.

was possible. In 1951, the first "any-deer" season was instituted. The following year the first north Missouri counties were opened to deer hunting, and in 1957, non-residents were permitted to hunt deer. In 1957, it was announced that deer restoration programs would be concluded. The deer herd's continued growth was assured. By 1958, hunters were bagging as many animals during open season as had existed in the state when legal hunting resumed in 1944. Future management of deer would focus on maintaining desirable population levels and controlling deer where they posed problems to landowners.

On the wild turkey front, A. Starker Leopold's research proved "wildness" was a heritable characteristic; since semi-wild turkeys lacked this they could not survive. For a number of years B. K. Leach, a lumber company executive, had been experimenting with breeding of semi-wild birds—crosses between domestic and wild turkeys—but survival had been disappointing. Fortunately, releases of the semi-wild birds were not made close to remnant flocks of native Missouri wild turkeys; hybridization would have been detrimental to



In sharp contrast to the 1934 map, the deer range in 1959 was statewide except for small areas in extreme southeast and southwest Missouri.

the native stock. Various releases of semi-wild birds were continued under carefully controlled conditions, but in every case were unsuccessful.

Studies revealed that by 1952, wild turkey numbers had hit bottom, estimated at fewer than 2,500 birds. In 1954, the Department embarked on active turkey management aimed at restoring turkeys to suitable but unoccupied range. The turkey program was shifted from research to management. Out of the research of Leopold, Ken Sadler and John Lewis, management efforts concentrated on increasing the native turkey populations by live-trapping them and stocking where habitat conditions were improved and local sentiment favored the releases. The same techniques that were successful in deer restoration went into the turkey program. Allen Brohn established and initially directed turkey restoration as a management program, which consisted of locating suitable unoccupied habitat and securing local citizen support of restocking efforts.

Wild turkey habitat in refuges was improved by creation of openings and water

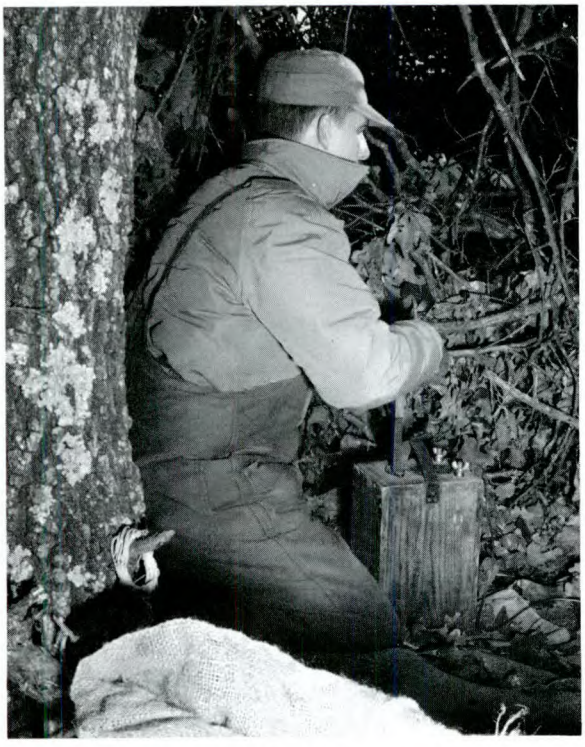


Biologist John B. Lewis, right, bands a turkey as part of research to determine the birds' mortality and mobility. The turkey restoration effort eventually led to statewide open seasons with legal harvests topping 50,000 birds annually.

holes, two items research had revealed were necessary to turkey production. On 45,000 acres of forest land committed to the program, attempts were made to create an opening and a water hole for each eighty acres of land. At first, live-trapping was done with traps similar to deer traps or pen traps—both inefficient ways to trap numbers of turkeys—until Biologist Kenneth Sadler adapted the cannon-net trap to capture turkeys in 1953. Biologist John Lewis further refined trapping techniques and from then on turkey restoration dramatically speeded up. The cannon-net trap had been devised by two federal employees at Swan Lake National Wildlife Refuge in 1948, to trap waterfowl for banding studies. Ken Sadler saw the possibilities for more efficient turkey trapping and adapted it for that purpose. Instead of trapping one or two birds at a time, the number of birds caught for restocking increased markedly. The way was clear to speed up turkey restoration.

Then the Department took a calculated risk. It was apparent that a major factor holding back turkey restoration was poaching. It was reasoned that if hunters could be convinced that turkeys were in fact being restored, it might increase landowner interest and cut down on poaching. In 1958, John Lewis recommended an open season, but it wasn't until 1960 that the Commission assented to a three-day season in fourteen counties, the first open season on wild turkeys since 1938. The scheme worked and open seasons and the turkey comeback continued until today we have statewide open seasons with legal harvests topping 50,000 birds annually.

More than any other wildlife program, turkey restoration is dramatic proof of how research and management can bring back a species from near-extinction to abundance. A great deal of credit must go to refuge personnel who refined the techniques, trapped deer and turkeys, and released them over the



In a 1950s era photograph, Lewis touches off a cannon net trap detonator. Refinements in the trap have resulted in lighter nets that are propelled by rockets instead of cannons, and battery detonators.

years. These are truly unsung heroes.[3]

Another major wildlife management program begun in 1948 was cover restoration. It was learned that a major factor limiting quail was a lack of suitable cover and food: in north Missouri cover for protection from predators and harsh winter weather was deficient, while in southern Missouri quail lacked desirable food plants. The Department had been making Korean lespedeza seed available to any cooperators who would plant it and had been promoting food and cover as part of the pond program, but in July, 1948, it launched a formal cover restoration program. Biologist Edgar B. Biffle was supervisor. The state was divided into seven districts, where a number of new biologists got their indoctrination into conservation work. Included were August F. Artus at Pleasant Hill, later to manage the Upper Mississippi Wildlife Area, Kenneth C. Sadler at Chillicothe, who would later make important contributions to the turkey program and become research supervisor, and William McDannold at Shelbina, who later would manage the Pony Express Wildlife Area.

Biologist Harold Terrill, working with the SCS and Extension Service, suggested multiflora rose as an excellent wildlife food and cover plant and sericea lespedeza as a cover and emergency food plant. These two plants, plus Reed canary grass which also provided erosion control, became the basis for the wildlife cover program; landowners were contacted in each district and urged to create rose plantings as farm fences and to seed sericea and Reed canary grass in odd areas where it would provide food and shelter for wildlife following heavy snows. Field Service agents and conservation agents were enlisted to help push the program. The Forestry Division's nursery provided the rose seedlings which were made available at cost to interested landowners. Agricultural agencies and commercial nurseries also promoted use of multiflora rose. In 1952, the U. S. Department



Biologist Allen Reed Twichell (standing next to car window on left) delivered a load of Korean lespedeza seed to this group of Irondale residents as part of the cover restoration program.

[3] Refuge workers involved in deer and turkey trapping include Albert G. Adams (1945-1961), Arley F. Blackwell (1937-1958), Otto Bower (1938-1958), Monte D. Burch (1965-), Lyman J. Chronister (1940-1965), Charles E. Coatney (1943-1975), Herbert F. Davis (1939-1974), A. Bernice Morrison (1957-1968), Ray L. Woodring (1941-1969).



Hugh Steavenson, manager of the SCS plant nursery at Elsberry, inspects a two-year-old planting of multiflora rose. Initial impetus for multiflora as a living fence came from the SCS and was adopted by the Department for wildlife habitat.

of Agriculture approved planting multiflora rose as a living farm fence and for erosion control as a cost-shared practice in the Agriculture Conservation Program.

Tons of sericea lespedeza seed and millions of multiflora rose seedlings found their way onto Missouri farms. The rose provided fences reputed to be "horse high, bull strong and hog tight." It also provided food, and



Jack Stanford, Department biologist from 1946 through 1981, became a nationally recognized authority on bobwhite quail.

escape and loafing cover for quail, songbirds and rabbits. It wasn't until a number of years later that some of multiflora rose's less attractive features became evident. It was found that unless carefully controlled it would escape to pastures where it became a liability. Nevertheless, it did its job. Eventually, the Department dropped multiflora rose from the program and even entered rose control programs with a number of counties.

The food and cover restoration efforts of the Department continued to evolve as part of various programs in the Wildlife Services Section. The loss of farm game habitat from various causes is still a challenge to wildlife managers. It has led them into such activities as promotion of warm season grasses and development of trailing soybeans in attempts to offset habitat losses.

The cover restoration programs had restoration of habitat for quail as their primary target. Few species have been studied as thoroughly as quail and in Missouri that has been the work of Jack A. Stanford. From August, 1946, until his retirement in December, 1981, quail have been Stanford's principal occupation. One of his early research efforts was a study of quail stocking versus natural production, which laid to rest forever the notion that quail could be brought back to abundance by release of pen-reared birds. He proved that if habitat conditions are right for quail, they will fill those coverts naturally. Without adequate habitat, released birds will not survive. He proved that each year there is a forty percent loss of carrying capacity from November 1 to January 1, and that the autumn population of quail will decline by seventy percent, whether quail are hunted or not. Stanford developed techniques to assess quail populations which became an early basis for setting hunting regulations.

Between 1956–58 an exotic species, coturnix quail, was studied to determine its adaptability to declining bobwhite habitat, largely in northern and western Missouri. There were releases of 37,972 coturnix quail in fifteen areas, but they were unsuccessful. Other exotic game bird studies involved Reeves pheasants, Iranian black-necks and Korean pheasants obtained through the U. S. Fish and Wildlife Service. None of them showed any

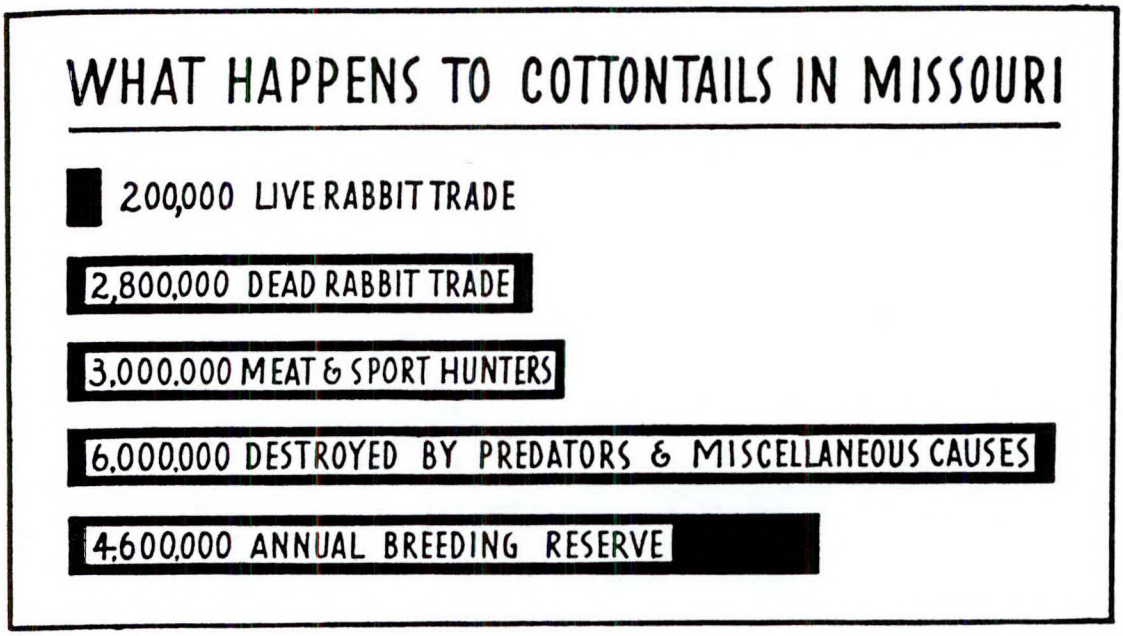


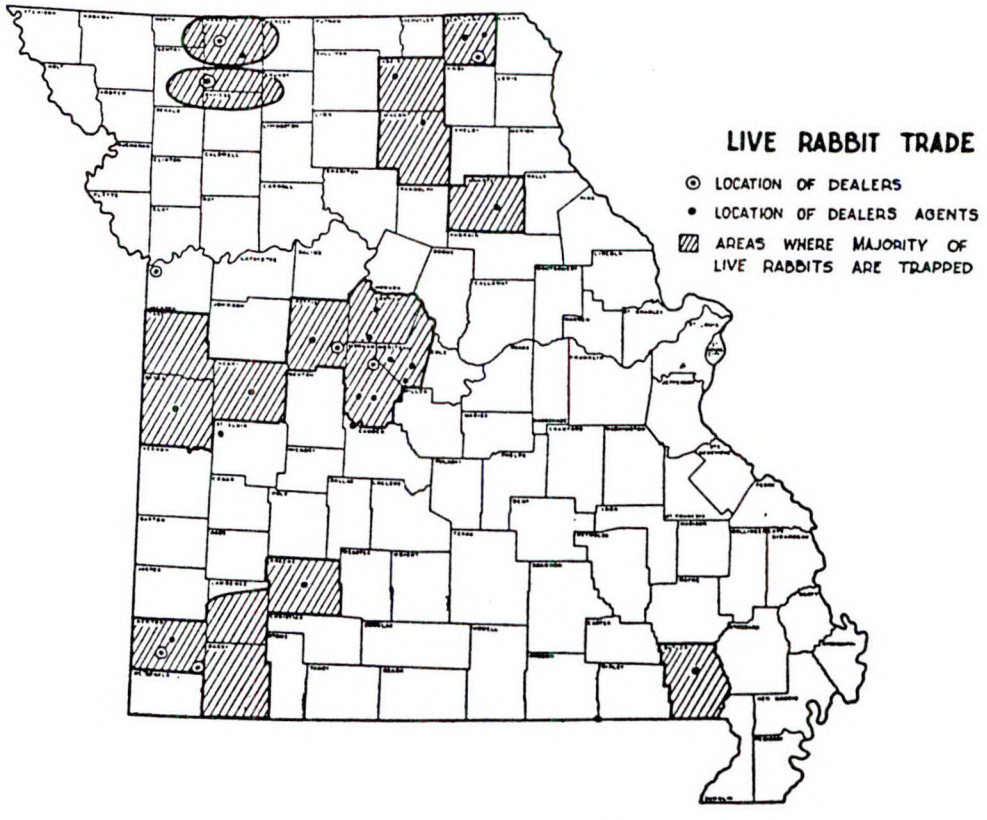
The Department experimented with coturnix, or Japanese, quail in the 1950s in efforts to find species that could adapt to less than ideal quail habitat. The coturnix proved to be too migratory and unsuited for Missouri conditions.

real promise, but ring-necked pheasants already in Missouri began to extend their range, permitting limited open seasons since 1954. Missouri has traded turkeys for wild-trapped pheasants with Iowa to speed up the extension of pheasant range, and the legal bag in recent years has exceeded 46,000 birds.

The cottontail rabbit has occupied an unusual position in Missouri wildlife annals. It had little consideration as a game animal until 1953, when the first season and limits were established. Prior to that time it was hunted for sport, of course, but millions of rabbits were commercially harvested each year for release in eastern states or as meat in the dead rabbit trade. The live-rabbit trade was discontinued in 1954, and the dead-rabbit trade a year later. There were three species of rabbits in Missouri in addition to the cottontail: the swamp rabbit, whose numbers quickly declined as wetlands were drained and is now completely protected; the white-tailed jackrabbit, known from northwest Missouri and now thought to be extinct in Missouri; the black-tailed jackrabbit, formerly fairly common in the western prairies of the state, but now considered rare and possibly endangered. The cottontail remains, but no longer in the numbers that were once estimated at ten million or more annually. They are widely distributed in the state but the northeastern riverbreaks, western Ozark border and western prairie regions probably have the best populations.

C. W. Schwartz researched the home range and breeding season of cottontails in 1942, which was the basis for later studies. Kenneth Rowe was assigned to rabbit studies in 1946, and he developed censusing techniques used for many years. Howard Wight investigated causes of rabbit population changes, and Kenneth Sadler continued and expanded





This 1942 map shows mortality causes and location of major rabbit trade activity.

these studies.

Rabbits tend to be cyclic, with years of population highs followed by low population years. But the overall trend has been downward as farming methods have changed the habitat. Where Missouri once had smaller farms with croplands, pastures and hay fields of mixed components, it now has larger and fewer farms, with pastures essentially of fescue grass. The bulldozing of Osage orange hedgerows also has played a part in rabbit decline, but the cover restoration programs for quail can be of help to rabbits as well.

Furbearers in Missouri have made dramatic comebacks since 1937, in some cases. Raccoons and beavers especially have increased. When the Commission was established it was believed that raccoons might be on the way to extinction in Missouri; the beaver was already essentially gone.

Carl Noren was assigned to raccoon research. He devised a tagging and quota system for raccoon hunters and trappers that was a factor in their restoration. Probably even more important was World War II, which took many of the hunters and trappers out of the fields and forests for a few years. Curbing wildfires and vigorous law enforcement played a role, also. Raccoon harvests rose from an average of 25,000 between 1935 and 1946, to an average of 96,000 the next ten years, up to 136,000 by 1966. In 1985, the raccoon harvest was over 428,000 animals, mostly taken by hunting.

Frank W. Sampson took over furbearer studies in 1947, and followed them until his retirement in 1977. He found that with the exception of raccoons and foxes, which are hunted as much or more than they are trapped, other furbearer harvests are governed more by economics—the worldwide price paid for pelts—than by sporting factors. Undoubtedly some trapping is done for sport, but the sale of fur pelts is most important; the number of people engaged in trapping in any given year will depend on fur prices. Beaver populations have returned to the point they sometimes become nuisances, as trapping pressure for them is light. Spotted skunks have declined, badgers and coyotes increased. Other species hold their own, despite widespread changes in their habitats and changes in human efforts to hunt or trap them.



Furbearer Biologist Frank Sampson with muskrat pelts in a 1950 photo. Sampson's research showed that fur harvest levels were influenced by market prices for pelts.

One wildlife research effort that paid off in two ways was the development of a precipitin test by Allen Brohn and LeRoy Korschgen. Conservation agents were occasionally foiled in deer poaching cases when they seized dressed or packaged meat but could not positively identify it as deer. Brohn and Korschgen developed a test that definitely identified deer meat. It is a laboratory procedure in which sensitized serum can distinguish deer blood or venison, even in trace amounts, from meat or blood from other animals. The test was acceptable in court as evidence and the agents had a new tool in their arsenal against game law violators. Development of the precipitin test also helped biologists gain acceptance by old-line conservation agents who had hitherto considered them ivory tower college boys. It was another example of research paying off in the everyday world of wildlife management.

It is not always easy to distinguish where



Biologist Allen Brohn, with LeRoy Korschgen, developed the precipitin test used by conservation agents to identify wildlife carcasses in suspected poaching cases. Brohn became Game chief in 1968 and assistant director in 1969.

research, management and services differ. A good case in point is the predator control program of the Department. When the Commission came into being it almost immediately came into a controversy about foxes. For a fox hunter there are almost never enough foxes, especially red foxes. To the farmer of that day, foxes were too numerous and they demanded relief. Sportsmen, too, were concerned about predation, shooting house cats, hawks, owls and foxes indiscriminately as competitors for the game they hunted. The whole question of predation was a complicated one.

The first attempt at control was to hire a hunter and assign him to a couple of counties to reduce local fox populations. The attempt was only moderately successful. In 1945, the Department hired Lewis J. McIntosh and in 1946, Robert H. Smith; they had both been trappers with the federal government. There gradually evolved what has become known as the "Missouri system" of predator control.

McIntosh and Smith became essentially extension trappers, going to areas where local farmers were having troubles with foxes and coyotes, and teaching farmers how to trap for the specific animals causing the damage. This approach was so successful that farmers immediately reported eighty percent reductions in predator-caused losses. It was a "rifle approach" to control problem individuals, instead of declaring war on the whole species. Other states have since adopted the same system, with similar results.

Much light was shed on the role of predators by studies undertaken by biologist LeRoy J. Korschgen, who was assigned to food habits research. Korschgen determined that preda-



Biologist LeRoy Korschgen was the closest thing to a pure scientist the Department had, though his food habit studies were of great practical application in understanding predator/prey relationships.

tors were not nearly as bad as imagined, either as predators on domestic animals or game species. The Commission extended protection to many predator species, and in some cases took advantage of their sporting qualities with open seasons. The public's views have changed over the years as the result of educational campaigns, and hawks strung up on the fence have disappeared along with demands for extermination of predators like coyotes and foxes.

Today, the Department has three wildlife damage specialists whose services are available to landowners, and they deal not only with predators, but all species of wildlife that become nuisance animals, from coyotes to deer and birds. Research developed the techniques and approach to wildlife damage; management and services make the benefits available to the public.

Wildlife management lands, now embracing 161 areas totaling over 400,000 acres, can be said to have started with acquisition of Peck Ranch lands in 1945. Six miles square, it became the focus of deer and turkey restoration efforts. Another major acquisition was the August A. Busch Memorial Wildlife Area in 1947. Its initial use was for field trials, wildlife management demonstration and fishing for the St. Louis area. Waterfowl area development began with the 1947-48 purchase of the Fountain Grove area in Linn and Chariton counties. As Canada goose populations developed, the Department signed a 1955 agreement with the U. S. Fish and Wildlife Service to create a public hunting area

at Swan Lake National Wildlife Refuge. Duck Creek waterfowl area was begun in 1952.

A number of areas were acquired as part of the upland game habitat restoration programs, and acquisition of wildlife lands in general has speeded up since 1977 with passage of the conservation sales tax under the *Design for Conservation* program. Wildlife Division areas are managed for a variety of primary uses, such as wetland wildlife, upland wildlife, forest wildlife, prairie preservation, or refuge, but also for multiple uses including fishing, natural history and conservation education. The intent is to maintain high wildlife populations for public recreation of all types.

Today's Wildlife Division had its inception in the "Refuge Section" of the old Fish, Game and Forests Division of 1937. At the time, refuges were the only wildlife program of the Department. It wasn't until the first biologists were hired under the Pittman-Robertson Federal Aid to Wildlife Act that modern wildlife management started.

"Game and Refuges," supervised by Bruce Lewis, continued alongside "Federal Aid" as a section until 1947, when a Game Section was created to replace the refuge section with Paul Q. Tulenko as the first chief. Federal Aid Section was renamed "Wildlife Research" in 1964, when the Game Division was created as a separate entity. Game Division was renamed Wildlife Division in 1973, reflecting its changing role in management of species of wildlife other than game species.[4]

Wildlife Division presently has four sections: Land Management; Administration, including planning, coordination and special programs; Wildlife Research; Wildlife Services,



Charles E. "Ted" Shanks, Wildlife Division chief from 1964 until his death in 1968, releases a banded mallard in 1949 for waterfowl mortality and movement research.

[4] Chiefs of the units that became Wildlife Division include Arthur L. Clark (1938-1944), Melvin O. Steen (1944-1956), Larry R. Gale (1957-1964), Charles E. "Ted" Shanks (1964-1968), Allen Brohn (1968-1969), Dunbar Robb (1969-1971), Mike C. Milonski (1971-1976), Dean A. Murphy (1976-1984). Since 1984, Kenneth M. Babcock has been division chief.

including private land programs, plus an agricultural liaison position. The Division budget in 1985 was nearly $6 million, and there were 127 permanent, eleven term and many seasonal employees. The Division's equipment inventory is valued at nearly $3 million—a far cry from the days when field personnel were scrapping with one another for the use of a few slip scrapers to dig ponds.

The Administration/Coordination Section, currently headed by George P. Dellinger, oversees the Division's fiscal responsibilities, planning for wildlife on Department lands and statewide, coordinating wildlife projects with related agencies, and implementing special projects like wildlife reintroductions, special permit programs and the donation program.

The A/C Section oversees the turkey trapping program, which continues to trap Missouri turkeys for use in trades with various states for other wildlife species. In 1984-85, for example, 192 turkeys were traded to Indiana, Kentucky, Illinois and Wisconsin for ruffed grouse and river otters. Since 1982 there have been 202 otters released at eleven different sites in Missouri. In 1984, there were 44 ruffed grouse released at nine sites, all resulting from turkey trades. Over the years 2,266 turkeys have been traded for fish, grouse, pheasants, otters and prairie plant seeds.

The A/C Section also oversees the giant Canada goose restoration program. Begun in 1978 as a direct result of twenty-five years of research, giant Canadas by the thousands now reside in many different areas of Missouri.

The A/C Section's planning function involves management plans for Department areas, planning for preservation of species like prairie chickens, and habitat management planning. Its coordination activities include



Don Starkey, left, late president of the Missouri Trappers' Association and Dave Erickson, right, inspect one of four male otters purchased by the Association and donated to the Department's restoration effort. Evidence indicates otters are once again breeding successfully in the state.



Two pioneers in the restoration of the giant Canada goose to the state were biologists Richard Vaught, left, and Harry Deming, right. They led the way in introducing washtub nesting at Trimble Wildlife Area.

working with Mark Twain National Forest, Ozark National Scenic Riverways, Army Corps of Engineers, Soil Conservation Service, and levee and drainage districts that have solicited Department assistance in habitat improvement.

The A/C Section's agricultural liaison program, currently headed by Raymond D. Evans, grew out of declining wildlife conditions on private land and the need for closer contact with agriculture programs at the state and federal level. Evans' job involves liaison work with the University of Missouri and private, state and federal agencies dealing with agriculture. The goals are to encourage awareness of the positive and negative aspects of farm programs on wildlife, encourage research and development of farming systems beneficial to wildlife, and oversee the orderly flow of agriculture/wildlife information between farming and wildlife groups.

Wildlife's Land Management Section,[5] presently headed by Jim L. Choate, oversees the management of 161 areas totaling 400,430 acres, including six waterfowl refuges totaling 23,000 acres. It also manages thirty prairie areas comprising 8,360 acres. Of the total, 201,832 acres are Department-owned and 206,958 acres are under license or lease with other agencies. The state is divided into districts, north and south, with district supervisors and staff support of area managers, area assistants and aides. Management emphasis varies, depending on the lands, but includes upland, wetland and forest wildlife, natural history, fishing, stream access, educational or refuge. The areas get heavy use. At wetland areas in 1985, there were 31,982

[5] The Wildlife Management Section was created in 1984 from several different units. Among those heading up various wildlife management units over the years were Bruce Lewis, George Quinn, George Laun, Harold V. Terrill, Allen Brohn, Dunbar Robb, Mike C. Milonski, Robert Dunkeson, Richard Vaught, George Dellinger and Kenneth M. Babcock.

waterfowl hunter trips, 7,824 small game hunter trips, 135,090 fishing trips and 160,116 other users.

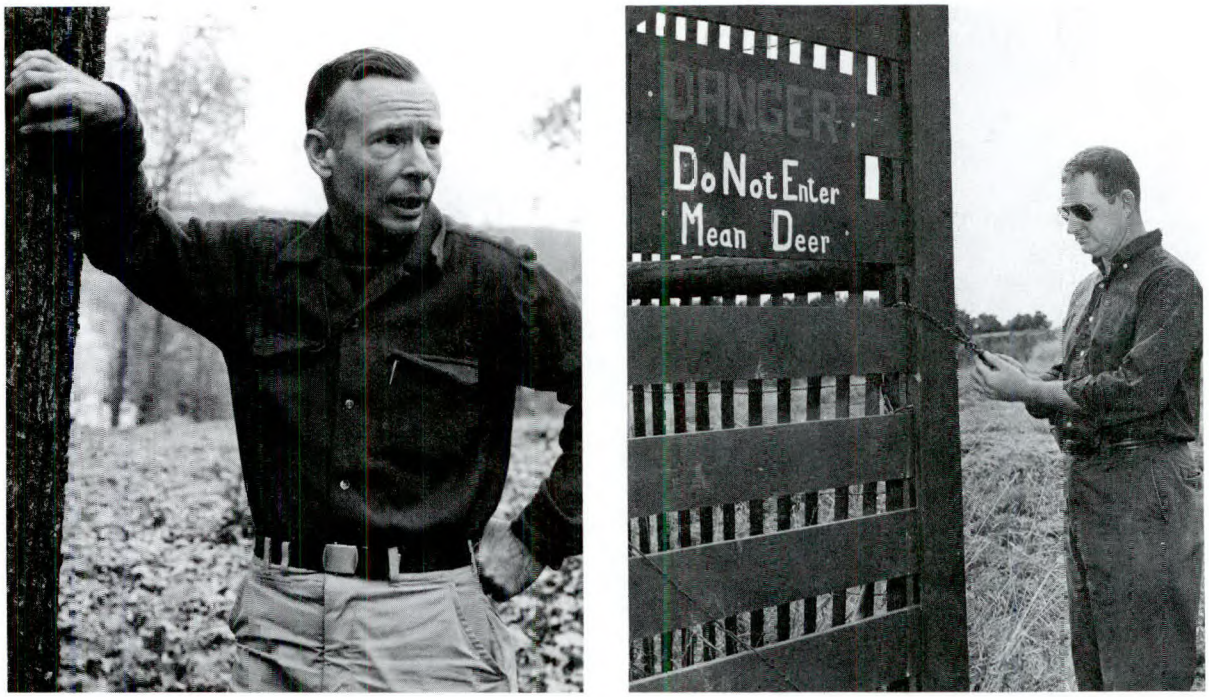
The Wildlife Research Section, which grew from the old Federal Aid Section, is currently supervised by Oliver Torgerson. There presently are twenty-five research biologists and support personnel. The section provides a continuing information base for the division and the Department. Major areas of investigation include wildlife harvests and hunter statistics and studies of deer, bobwhite quail, wild turkey, furbearers, waterfowl, rabbits, mourning doves, squirrels, prairie chickens, pheasants, ruffed grouse, non-game species such as Indiana and gray bats, songbirds, small mammals and trumpeter swans.

The Wildlife Services Section, with Sam B. Kirby as superintendent, now includes the old Field Service Section, which was transferred from Field Division in 1977 but has other functions as well. Field Service agents are now known as Wildlife Services biologists and there are twelve of them scattered over the state. Their job remains the same: getting wildlife management programs on privately-owned land and working with state and federal agencies that may be involved in wildlife programs.

The section oversees the extension wildlife damage control program, administers the PAWS program and runs two demonstration farms (in Lawrence and Worth counties) where economically sound farming practices and wildlife management are featured. Five private land specialists work with the Soil Conservation Service, training and assisting their employees to plan for wildlife benefits as they consider erosion control practices. To aid habitat restoration for upland wildlife,

Species	1935–36		1985
Quail	1,521,000		1,076,192
Ruffed Grouse	—	closed 1905; opened 1983	47
Prairie Chicken	—	closed 1907	—
Pheasant	—	closed 1907; opened 1954	46,085
Turkey	500	closed 1938; opened 1960	37,575
Dove	100,000		802,636
Geese	No data		50,380
Ducks	No data		181,662
Deer	82	closed 1938; opened 1944	86,432
Squirrels	2,000,000		1,238,649
Cottontail	4,500,000	(Over 1 million were commercial trade)	1,345,372
Opossum	221,700		37,705
Skunk	121,648		323
Civet	20,753		14
Raccoon	15,644		143,122
Muskrat	67,058		25,501
Mink	11,598		4,101
Red Fox	5,458		2,366
Gray Fox	2,933		3,968
Weasel	4,585		11
Otter	12	closed 1937	—
Beaver	—	closed 1929; opened 1953	5,781
Coyote	1,000		8,910
Bobcat	326		692
Badger	none recorded in the state		67

A table compiled by Wildlife Division shows the ups and downs of wildlife harvests during the past fifty years.



Dunbar "Dixie" Robb, left, played a major role as biologist in deer restoration efforts. He became Wildlife Division chief in 1969, but succumbed to cancer in 1971. Dean A. Murphy, right, began his career as a deer biologist and became Wildlife Division chief in 1976. In this 1960 photo, he is involved in researching the effects of dieldrin on wildlife.

the grassland management program assists private landowners by loaning specialized planting equipment and providing technical information.

All this is far different from the early days when a handful of biologists were sent out into the state to "do something for wildlife." Utilizing the most modern research methods involving computer data banks and sophisticated management techniques, the Wildlife Division has a better knowledge of wildlife, the conditions affecting wildlife and what can be done about them, than ever before. There have been losses and gains. Some small game species have declined over the years, while other species have been brought back from near-extinction to abundance. New species have been introduced and extirpated species are being brought back. The future has its bright spots and its challenges.

Plans call for more intensive development of existing areas, purchase of four to six new upland areas and three new wetland areas, and intensified small game management on both public and private lands. Big game restoration—deer and wild turkey—is a resounding success and needs only continued careful management in the years ahead. The restoration of river otters, ruffed grouse and species like trumpeter swans is under way. Attention is being focused on other non-game species and they increasingly will be subjects for study and management.

The Wildlife Division is in a better position today to meet the challenges than it was in those dark days of the 1930s, thanks to the far-seeing biologists and administrators who laid the foundation for today's wildlife management programs.

Fisheries Division

All thirteen fisheries employees listed in 1937 worked in hatcheries. In fact, for the first two years the entire fisheries program of the new Conservation Commission consisted of hatching and releasing fish, plus some fish rescue work. It was the program inherited from the old Fish and Game Department.

Director Bode had no training in fisheries work and, at first, other matters occupied his attention. Dr. George B. Herndon, chief of Fisheries, was a dentist by profession who had been politically appointed to his post under Wilbur Buford. He had no background in fisheries and, although a good administrator, offered little real leadership in development of fisheries programs beyond what had been done in the past. Since the new Commission felt upland wildlife problems more pressing and trained fisheries personnel were difficult to locate, it wasn't until 1939 that they got around to hiring a fisheries biologist.

They were moved to do this by complaints that fishing in Lake of the Ozarks had deteriorated from the glory days following impoundment in 1931. Albert E. Weyer, with a master's degree from Oberlin College, was



A photo of Bennett Spring during the 1930s shows the old dam, trout hatchery and site of the new bridge below the old ford, where a car valiantly crosses the river.

sent to Lake of the Ozarks in July, 1939, to determine why fishing wasn't better and what could be done about it. Fisheries research had come to Missouri.

Unfortunately, Weyer was called into government service during World War II and his work at Lake of the Ozarks was cut off. He recognized the importance of habitat to fishes and managed to introduce some aquatic plants into the lake, the lack of which he believed to be an inhibiting factor.

A few months after Weyer was hired, a chief fisheries biologist, Dr. William C. Frohne, educated at the University of Tubingen, Germany, Cornell and the University of Michigan, was employed. He began the first systematic survey of Missouri's streams in 1941, to "identify the more important factors which influenced the population of fishes in each stream, to the end that a practical plan of stream management to improve conditions for fishes and fishing might be developed." According to John Funk, who later headed fisheries research, the survey was modeled after similar surveys which had been done in New York and elsewhere and was the generally accepted form of fisheries investigations of the time. Frohne's survey work was also interrupted by the War, and a report was rather hastily compiled that was of little value for future use.



Paul G. Barnickol, shown here in 1941, was hired by the Department in 1939 to investigate water pollution problems. He would rise to become chief of Fisheries and assistant director.

Some fisheries work had been done by wildlife biologists. A. Hugh Denney had made collections of fish in the area where he was assigned, and earlier as an employee of the U. S. Forest Service. In 1940 and 1941, a graduate student, George V. Harry, made collections from representative waters sufficient for a comprehensive study of fish distribution, but his work was interrupted by World War II and never resumed.

Paul G. Barnickol, who was to become an assistant director, was hired in 1939 and assigned to pollution investigations. He dealt with problems much the same as today's—acid pollution from strip mines, sewage effluents, packing plant wastes, "summer kill." As there were no pollution laws on the books, a polluter could only be prosecuted for killing fish. Reports of fish kills usually were received too late for specific charges to be filed. In the rare instance when an offender was brought into court the jury, reflecting the apathy of the times, was likely to find him not guilty.

Fisheries research, along with many other Department programs, suffered from personnel and equipment shortages during World War II. It got a boost in 1944, when an aquatic biologist, Dr. Robert S. Campbell, was added to the Cooperative Wildlife Research Unit of the University of Missouri. For the first time, courses in fisheries and aquatic biology were offered.

Also in 1944, Missouri and Illinois undertook a cooperative survey of fish and fisheries of the Mississippi River which documented conditions at the time and resulted in recommendations for management, especially of commercial fishing. In 1945, a survey of conditions on the Missouri River was done by the Department and University of Missouri.

One of Fisheries' early major programs—farm ponds—actually had its inception in the Game Section. Biologist Harold V. Terrill is generally credited with beginning the pond

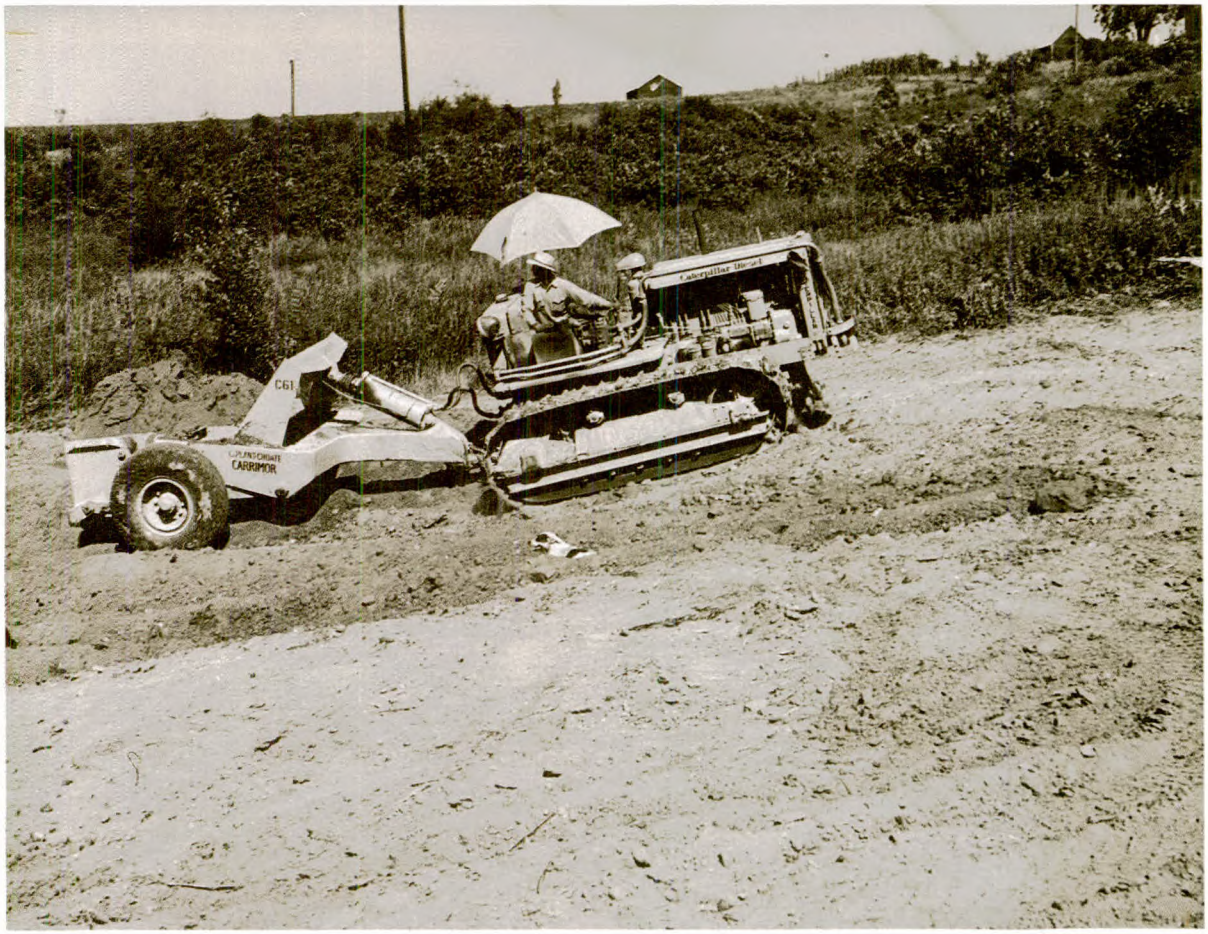
program. Terrill found there was only one water area with aquatic plants, capable of supporting wildlife through the year, in each 13,755 acres of the state. Access to water (remember, we were just coming out of a drought) was a limiting factor for upland game. The pond program's aim was to get water on the uplands for wildlife. A report stated, "Early in 1939, the Commission recognized the potential importance of farm ponds as a partial solution to the problem, and promptly undertook to develop a practical plan to bring about the construction of more farm ponds of a type which would be permanent, furnishing water in critical periods of drought and which would serve the needs of wildlife."



Willis Hanson, left, and Charles Purkett, right, were two early Fisheries Research biologists.

Early Department staffers gathered March 26, 1943, at Stephens Hall on the University of Missouri campus for this group photo taken by Paul Dalke. Recognizable among the crowd are Bettye Hornbuckle, Sydney Stephens, Harold Clover, I. T. Bode, Owen Turnbull, Paul Tulenko, Charles Schwartz, George B. Herndon, Herbert J. Fisher, Paul Barnickol, Glenn Pittenger and Glen E. Stoner.





A work crew constructs a farm pond on the Frank Oliver farm near Linn in 1941. Most pond construction was done by farmers who borrowed equipment from the Department.

The Department began advocating construction of farm ponds with the added inducement of having water available for livestock, recreation and even domestic water supply. The University published a bulletin on pond location and construction, also adopting farm ponds as an Extension program.

The Department bought a few bucket scrapers for loan to cooperating farmers, eventually adding more advanced rotary scrapers to its arsenal. Because scrapers were in short supply, field men competed with each other for their use, and gradually farm ponds began to dot the landscape. In 1941, there were 682 ponds completed and 188 begun, with plans for 612 more ponds scheduled for 1942. When federal subsidies for pond construction became available the program really got a boost. The Department made available pipe for bringing water to livestock, and even helped with fencing on some demonstration ponds.

As an added inducement, the Commission authorized free stocking of new ponds with fish from its hatcheries, if the landowner would agree to permit some public fishing. In 1945, fisheries biologist Aden C. Bauman was assigned to study farm ponds to make them more suitable habitat for fish. He studied different combinations of fish species, stocking rates and the effects of fertilization. Bauman as killed in an airplane crash while surveying farm ponds on August 31, 1947. Another biologist assigned to pond research, Richard C. Marzolf, also died accidentally in

1955 when using a primitive diving lung for underwater pond study.

The farm pond program has continued to be popular and it is estimated that we have at least 320,000 of them today, many stocked with Department fish. In a peak year, the Department stocked over 6,000 ponds with fish. One major benefit of the pond program was that most were built in areas of the state deficient in water and where there had been little fishing opportunity before the farm pond program was adopted. Now they provide over a million recreational fishing trips each year.

With World War II over, Fisheries programs accelerated. A new kind of stream survey was begun in 1946, under John L. Funk. Designated stations were set up on representative streams which were sampled spring, summer and fall each year to determine seasonal and annual variations in fish populations. This was continued for eight years and provided a good deal of valuable information on the diversity of stream fish, the magnitude of seasonal and annual variations, and the effects of floods, weather and other environmental factors. The information furnished was frequently used in setting regulations. This "direct census," as it was called, was modified on Black River to accommodate comprehensive studies being made with University of Missouri personnel of pre- and post-impoundment conditions of Clearwater Reservoir (impounding Black River in 1948), which resulted in a landmark study of its type.

Funk also set up a general creel census;



Fisheries Biologist John L. "Slim" Funk, right, records data on fish captured using the electric seine in this 1940s era photograph. Fish were weighed, measured and a scale sample taken from which growth rate and age could be determined.



Fisheries crews sometimes set up shop by river banks to conduct research. This camp occurred along the Black River in Wayne County in July, 1948. Two years later the Dingell-Johnson Federal Aid to Fisheries Act provided funds to double the Fisheries Research staff.

conservation agents collected data on fishing effort and catch information from anglers they checked in the course of their enforcement duties. This was continued for thirteen years and provided the first quantitative information on harvest of fish from all waters of the state. It showed that only a few anglers are likely to be successful, that a catch-rate of one fish in two hours was an average, and that most of the catch was composed of panfish on Ozark streams, bullheads and carp on prairie streams, and crappies and white bass on large reservoirs.

There were only two large impoundments when the Commission took over in 1937—Lake of the Ozarks, impounding the Osage River in 1931, and Lake Taneycomo, impounding the White River in 1913. But these were soon followed by Lake Wappapello (1941) and Clearwater (1948).[1] The Commission decided research was needed on large reservoirs and Missouri was fortunate to hire Biologist Paul Eschmeyer in 1949, for assignment to this work. Eschmeyer was noted for developing new techniques for estimating fish populations. His study involved netting fish to determine composition and abundance, obtaining scale samples for age and growth analysis,

[1] Other large reservoirs in ensuing years were Norfork (1944), Bull Shoals (1952), Montrose (1956), Table Rock (1959), Pomme de Terre (1961), Thomas Hill (1965), Stockton (1969), Harry S Truman (1979), Long Branch (1980), Smithville (1982), Mark Twain (1984), Longview (1985) and Blue Spring (under construction), for a total of 252,750 acres of water. Small impoundments, most privately owned and less than five acres in size, total 325,000, with 255,000 acres of water.



Creel censusing was an early attempt to keep tabs on fish and fishing. Census clerk Clarence Pumphrey, right, checks the catch of an angler on Lake Taneycomo in 1954, before Table Rock Dam changed the lake into trout habitat.

shoreline seining to measure success of reproduction and survival, electro-fishing and tagging to measure size and rate of exploitation of the bass population, and a quantitative creel census to measure harvest.

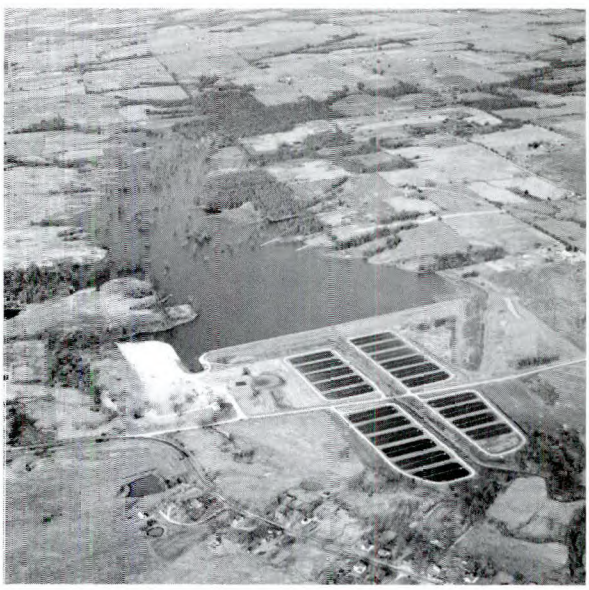
Wildlife management and research had been given a great boost with passage of the Pittman-Robertson Federal Aid to Wildlife Act in 1937. This was an excise tax on sporting arms and ammunition that was returned to the states through a complicated formula, to be used for research and land acquisition for wildlife. In 1950, a similar bill was signed—the Dingell-Johnson Federal Aid to Fisheries Act—which provided funds to states for fisheries work. These funds came from an excise tax on fishing tackle. Fisheries management and research were at last on an equal footing with wildlife. The research staff was doubled and more sophisticated equipment acquired.[2]

One of the problems with the farm pond studies was that they had to be conducted in cooperators' ponds where the researcher lacked full control. With federal funds available, twenty-two half-acre ponds were built below Little Dixie Lake, along with a well-

[2]Biologists hired in anticipation of passage of the Dingell-Johnson Act included Charles A. Purkett Jr., who was to become chief of Fisheries and later an assistant director, and stream researcher George Fleener.



Charles Purkett was one of the fisheries biologists hired in anticipation of the Dingell-Johnson Act. In this 1963 photograph, he pursues fisheries research in the laboratory.



Twenty-two half-acre ponds were built below Little Dixie Lake to facilitate pond research studies.

equipped field laboratory for pond research. In 1963, to aid in stream research, Big Buffalo Creek Wildlife Research Area in Benton and Morgan counties was acquired. It contained 1.3 miles of Ozark-type stream that were increased to 2.2 miles by relocation into old channels. The acquisition permitted experimentation by Biologist Otto Fajen in methods of stream management which would have been impossible on private land. From his studies, Fajen developed concepts used today to advise private landowners on stream habitat management.

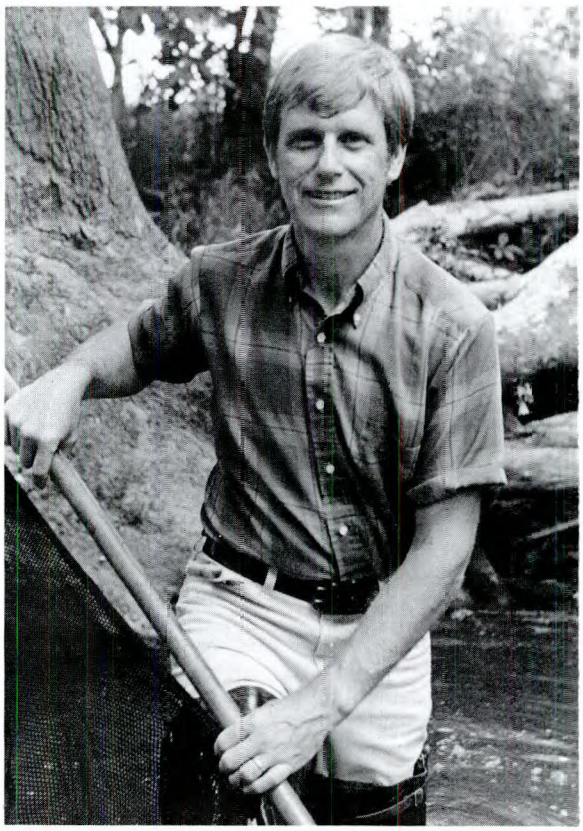
By 1967, the Fisheries Research Section consisted of a superintendent,[3] twelve biologists, one chemist, six fisheries workers, some twenty part-time and seasonal workers, plus stenographic help. It was organized into three branches: streams, impoundments and water quality. Today, with the same three branches plus a data processing unit, there are twenty-five full-time professional people on the staff, but some new specialties have been added: biometry,[4] aquatic entomology, genetics and computer sciences.

Fisheries research has come a long way. A great deal of information was amassed from those early surveys and the first fumbling attempts to learn more about the aquatic world and its denizens. A comprehensive study of fish taxonomy and distribution bore fruit with publication of Dr. William L. Pflieger's *The Fishes of Missouri* in 1975. Pflieger drew on the work of George Harry and the work of Biologist Perry Robinson as a basis for his study. It is the most comprehensive book on Missouri fishes for the layman ever published—but is equally valuable to the scientist.

We have learned a great deal about our streams and lakes and in recent years have refined regulations to perpetuate good fishing in the face of rising numbers of anglers using increasingly sophisticated equipment. In the days of the first fish and game chief, Arthur Clark, it was believed that any regulation made had to be applicable to every body of

[3] Fisheries Research Section chiefs were Dr. W. C. Frohne (1939-1942), Aden C. Bauman (1942-1947), Paul G. Barnickol (1948-1959), John L. Funk (1959-1972), Joe G. Dillard (1972-1981), Dr. James R. Whitley since 1981.

[4] Biometry is the science of statistics applied to biological observations.



Dr. William L. Pflieger wrote the authoritative work, Fishes of Missouri *in 1975. Pflieger won the prestigious American Motors Conservation Award for the book.*

water. We have since learned that each body of water is unique, though following well-known natural laws. It was once believed that no large impoundment could be "fished out." We know better now, and have sophisticated regulations like "slot limits" to maintain good fish populations. Although never completely abandoned, in 1968 the Department began a return to minimum size limits to maintain the quality of fishing in streams and lakes. We have learned about "opening day shock" to fish populations in new lakes, and developed ways to offset this. A prime example of such "shock" is Little Dixie Lake, where the bass population was seriously reduced in just the first two days of fishing.

Fisheries Biologist Lee C. Redmond found that anglers removed forty to sixty-nine percent of the adult bass population in only the first four days of fishing in new lakes of twenty-two to 205 acres in size, at a fishing pressure of only nine to thirty-eight trips per acre. He found that first-year harvest of bass at 240-acre Pony Express Lake reached seventy-four percent. Area Manager Jerry L. Turner, working with researchers Willis Hanson and Ralph Burris, found that at Little Dixie Lake anglers removed seventy-two percent of the bass. These high harvests created dramatic changes in the structure of the largemouth bass populations and within three years resulted in high populations of intermediate-sized bluegill, slow-growing bass and bluegill, and poor fishing success. A lower daily limit would have had to be two fish or fewer (down from ten) because most bass were removed at one or two per fisherman.

Missouri biologists led the nation in evaluating types of harvest regulations to prevent initial over-exploitation of bass in new lakes. These include a catch-and-release season prior to lake opening; leaving a lake open to fishing from time of original stocking; midwinter openings; refuge areas where fishing was not permitted; a forty percent harvest quota for bass; and length limits on bass.

Pond Research Biologist Kim Graham,



Fisheries Biologist Lee C. Redmond tackled the problem of "opening day shock" that occurs when opening day fishing seriously depletes a lake population.

working in Little Dixie research ponds, found the forty percent annual harvest rate on largemouth bass to be about the allowable maximum to maintain balanced bass-bluegill populations over a four-year period. Biologists Lee Redmond, Eugene Zanella, Arvil Ming and Area Manager William C. McDannold found that the forty percent bass harvest quota in a ten-acre lake maintained a balanced fishing population that showed good growth of both bass and bluegills throughout four years, but the forty percent quota was rapidly reached in four or five days at a fishing pressure of only eighteen to forty-four trips per acre—not a very practical method to manage public fishing lakes.

The most promising technique found to manage largemouth bass populations in new lakes was a minimum size limit—not the small size of early years which protected fish until they could spawn, but a balanced size—one large enough to maintain predation of intermediate-sized sunfish but not so high as to allow excessive natural mortality before fish were available for harvest. To permit the new size limits to function properly, new lakes were stocked first with minnows, then a reduced number of small sunfish and a later addition of small bass. This resulted in fast bass growth, early bass reproduction and a broad size range of bass when the lake was opened to fishing two years later. A size limit of fourteen to fifteen inches on bass at opening allowed an immediate harvest of one-fourth to one-third of the original stock and resulted in excellent fishing for at least five years. High-quality catch-and-release fishing for bass smaller than the size limit was an added benefit. Imposition of a twelve-inch bass limit on most of Missouri's relatively small, older public fishing lakes in October, 1968, improved the structure of bass and bluegill populations and improved fishing for bass and bluegill for varying lengths of time. Later use of a protective size range regulation (slot length limit) on bass further improved fishing in some of these lakes.

Management techniques learned from studies on smaller lakes were successfully applied to 25,000-acre Stockton Lake in the late 1960s and early 1970s, to provide continuous good fishing rather than the peak and decline cycle which previously characterized most reservoir fisheries. Use of minimum length limits on major predator fishes (black bass, twelve inches; walleye, eighteen inches; northern pike, tiger muskies, thirty inches) at newly developing Stockton Lake was a successful attempt to maintain high utilization, rapid turnover and high production of gizzard shad. Continuous good fishing resulted.

Using fish tags and a reward system, Biologist Arvil Ming found in the late 1960s that harvest of adult largemouth bass and spotted bass was a minimum of thirty-three to forty-two percent in large lakes such as Table Rock and Pomme de Terre. A fifteen-inch minimum size limit was established on Lake of the Ozarks, Pomme de Terre and Table Rock Lake in 1976. Bass fishing improved considerably, particularly at Lake of the Ozarks. National acclaim came to Missouri with newspaper headlines such as "Miracle in MO," reflecting the dramatic comeback and quality of bass fishing in the Show-me State's major impoundments.

Based on early research at Table Rock Lake by Fred W. Vasey and Michael A. Colvin, biologists found very high annual exploitation rates on crappie, similar to the earlier findings in the black bass studies. Under a thirty-per-day creel limit restriction, anglers harvested forty-three percent of the nine inch and larger crappie at Pomme de Terre Lake and fifty-six percent at Stockton Lake in only a couple of months. Fishing pressure for crappie was only four or five trips per acre of water. Very few crappie four years or older remained at the end of the fishing season. In 1984, creel limits on most big lakes were reduced to fifteen crappie per day and in Stockton and Table Rock lakes a ten-inch minimum size limit was also applied. These measures, resulting from years of research, put Missouri at the forefront of fisheries management in the United States.

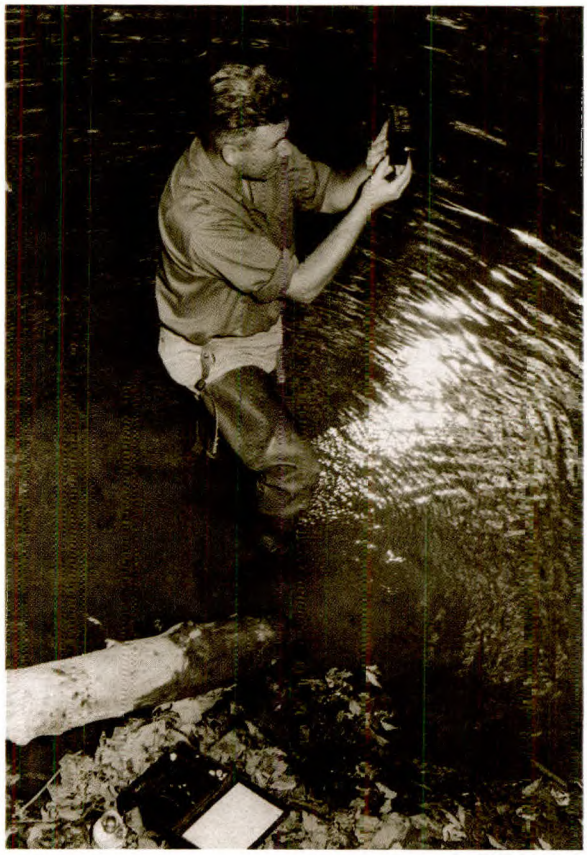
Water quality studies begun by Paul G. Barnickol and Herbert J. Fisher have become vastly more complicated with the addition of new chemicals into our environment by agriculture and industry. With increased urbanization and industrial development, water pollution has become an increasing problem. Milk processing plants, fertilizer factories, oil re-

fineries, chemical plants, lead mines and coal strip mines all produce oxygen-consuming or toxic effluents. The increased use of chemicals in agriculture and other applications has spread, sometimes leading to fish kills. Work of Department water quality specialists played a part in formation of Missouri's Clean Water Commission. In 1957, after a lot of hard work by the Conservation Federation, a water pollution law was passed that provided penalties for polluters. More recent Department studies of mussels, crayfish and other bottom-dwelling organisms have provided data for assessing effects of chlordane, lead and other pollutants—important knowledge in the continuing fight against degradation of our waters.

Studies of total recreational use of streams by Biologist George Fleener have been credited with saving the lower Platte River from channelization. His work opened our eyes to the importance of north Missouri streams to the state's overall recreation picture. Use of the corridors along streams for other types of recreation was found to be of importance at least equal to the fishery. Similar studies of the Grand, Gasconade, Bourbeuse, Big and Meramec rivers documented their values to the state's citizens for recreation. Studies of channelization revealed that approximately ninety percent of the fish were lost when a stream was channelized. Other studies, notably by John L. Funk and John W. Robinson,



Fisheries Biologist Willis Hanson uses an echo sounder on Lake of the Ozarks in this 1966 photograph. Hanson was an early leader in reservoir fisheries research.

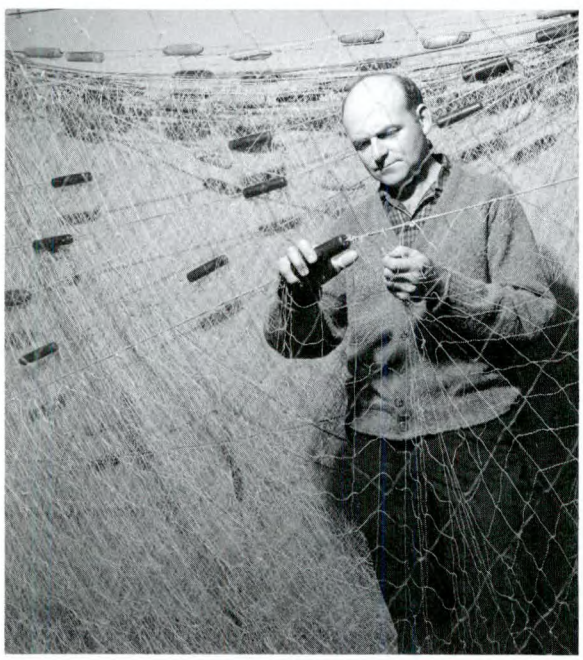


Herbert J. Fisher was one of the early water quality biologists of the Department. The pollution he detected in the 1940s is still with us, as are a host of new chemical pollutants that affect our once-pristine waterways.

documented the loss of aquatic habitat along the Missouri River by channelization and stream straightening. As a result of such studies, the division is learning how best to manage streams. By protecting the riparian corridors many problems can be prevented or substantially reduced. Cooperative efforts between the Department and the Soil Conservation Service to help landowners with problems will greatly enhance these valuable stream resources.

Reservoir research has shifted from the early emphasis on understanding the "system" to work on individual species. Crappie and bass studies resulted in the nation's first modern-day harvest restrictions on large reservoirs. Size and daily creel limits were imposed on crappie and size limits on black bass. In both instances it was the first time ever that large reservoir fish populations and angler success were improved through management efforts. Missouri's work on harvest management studies has changed the course of fisheries management nationwide.

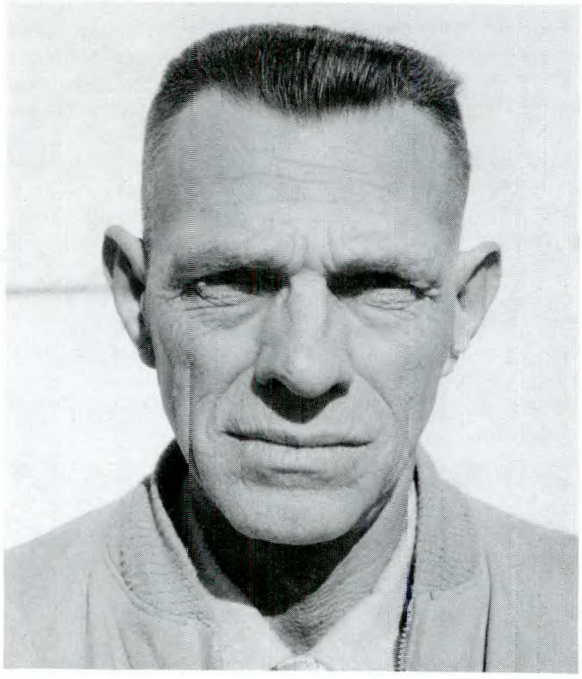
The new reservoirs presented problems that needed special attention. Construction of Truman Dam posed a problem to paddlefish which had depended on an annual spawning run up the Osage River from the time Lake of the Ozarks was impounded. The new dam would stop this, threatening Missouri's unusual paddlefish fishery. Between 1958 and 1961, Biologist Charles A. Purkett Jr. worked on the problem. Purkett was the first biologist to find the eggs and fry of the paddlefish and to discover their spawning requirements. Other biologists—Robert Needham, Tom Russell and Kim Graham—worked out their life history. Biologist Tom Russell and Hatchery Manager Jerry Hamilton developed methods to hatch and rear paddlefish; the Lake Ozarks and Truman Lake fisheries are maintained with hatchery-reared fish. They have also been successfully introduced into Table Rock Lake and are providing recreational fishing there.



Biologist George Fleener weaves a fishing net web in 1965. Fisheries biologists today use a mix of new and old technologies to accomplish their goals.



Purkett and paddlefish in 1968—the research conducted on paddlefish made it possible to maintain a fishery despite adverse effects of Truman Dam.



Hatchery Superintendent Guy Berry worked for both the old Fish and Game Department and the new Commission. He retired as superintendent of the Shepherd of the Hills Hatchery in 1969 after thirty-six years rearing trout.

Analysis nowadays has shifted from species to strains within species. Where it was once thought a walleye was a walleye, it was learned that there are different strains. Using a technique known as electrophoresis, which analyzes fish enzymes and proteins, it may be possible to select appropriate strains of faster growing, larger-sized fish for stocking. At the same time, it is possible to identify and preserve native strains of fish.

Hatchery work, too, has seen some remarkable changes over the past fifty years. In 1937, there were seven fish hatcheries in operation: Bennett Springs, Roaring River, Montauk, Lewis and Clark, Chesapeake, Branson and Sequiota, plus rearing ponds in Forest Park, Gibbs Lake, Glaize and Higginsville. Today there are ten hatcheries, five for warm water species, five for cold water species, plus rearing pools at Lake Paho.

Most hatchery workers in 1937 were politically appointed and none had any professional training, though they were good at their jobs. Guy Berry for example, who managed the hatchery at Sequiota and later Shepherd of the Hills Hatchery, was one of the best trout handlers in the country, despite the fact he could neither read nor write.

When the first biologists came aboard they were viewed with suspicion. The hatchery men believed the Fisheries Section was their domain and that the biologists were upstarts bent on changing their ways. When a professional biologist was sent to one hatchery to learn the ropes, the manager made life so miserable for him that he had to return to the research office. The manager believed the biologist was trying to get his job. And, at first, the biologists did not appreciate the qualities of the hatcherymen. Some biologists felt their job was to prove that some of the old practices were bad and they should find ways to do things more efficiently and economically. This didn't endear them to the hatcherymen, either. Fortunately, Superintendent of Hatcheries George Morris was an exception, and brought harmony between the parties.[5]

The Commission put a stop to indiscri-

[5] Hatchery Section superintendents have been A. G. Morris (1937-1968) and Charles E. Hicks (1969-1986).



Albert George Morris served as hatchery superintendent from 1937 to 1969. He also served four years under the old Fish and Game Department.

minate stocking of private waters for political cronies almost immediately. They established a policy of providing fish only to public waters. In 1941, this was modified to provide fish free of charge to private pond owners if ponds met certain specifications and a degree of public access was permitted.

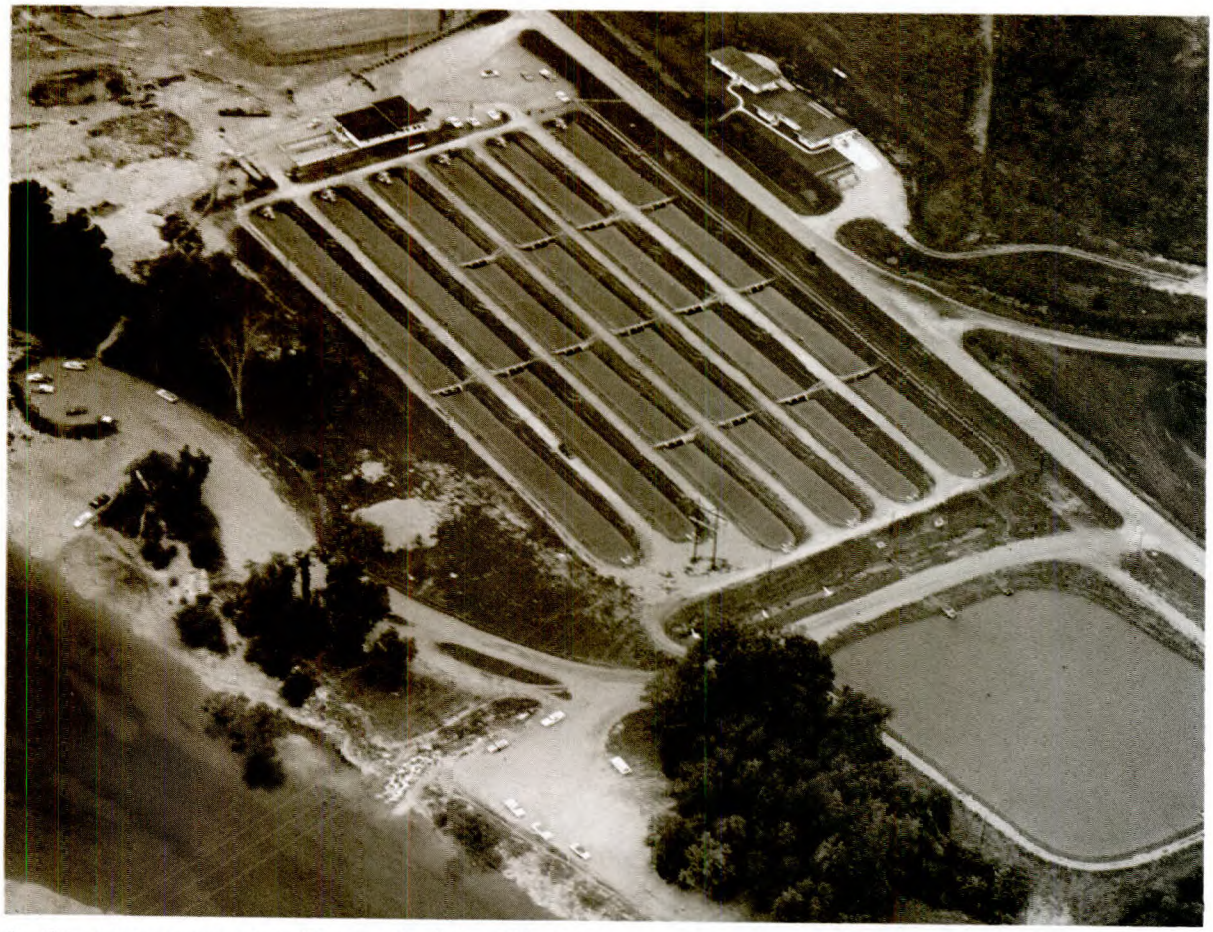
According to John Funk, there were doubts about the place of fish hatcheries when the Conservation Commission came into being. This was partly due to the observation that dumping fish indiscriminately into waters seemed to have no notable benefits. Questionable practices of some hatcherymen often resulted in stocking fish with little chance of survival—fry or eyed eggs, or sick and diseased fish. If game fish were not available, forage species might be stocked, but the reports were expanded anyway and "paper fish" was an inside joke. Nevertheless, the expansion of hatchery facilities by work of the WPA and CCC was needed when the new farm pond program created a heavy demand for fish. Fish continued to be stocked in streams as "maintenance stockings" into the 1940s, when studies showed that natural reproduction was adequate to maintain populations and the practice was halted.

Trout programs at the three state parks were another factor that kept hatcheries in operation. Put-and-take trout fishing has grown rapidly at the parks,[6] necessitating drastic changes in hatchery operations to keep up. One change was selective breeding of spring-spawning trout to fall spawners. This enabled hatcheries to hatch and rear the fry inside during the winter and move them to outside raceways vacated by the last year's crop being stocked in the streams.

Another efficiency was the development of pellet trout food by Hatchery Supervisor A. G. Morris, working with a nutritionist from Ralston Purina Company. Previously, trout were fed a ration of liver and waste meat products mixed with cereal. It took a great deal of time and skill on the part of the hatcherymen to grind and mix the food. By 1958, Missouri trout hatcheries converted to the dry pellet food at a great savings in time and labor. The pellets floated and trained the trout to feed at the surface. Most important, the ratio of amount of food required to produce a pound of trout was reduced, resulting in increased efficiency and reduced costs.

When Table Rock Reservoir was impounded in 1959, its low-level outlet poured cold water into Lake Taneycomo, which became too cold to support good populations of any fish except trout. This was foreseen by Fisheries personnel, who made arrangements with federal hatcheries to provide trout for annual stockings. Arrangements for a water supply were also made with the Corps of Engineers and Shepherd of the Hills Hatchery was constructed by the Department below Table Rock Dam. It went into operation the

[6] Maramec Spring Park was added to the intensive trout management areas in 1958.



In this 1961 aerial view, Shepherd of the Hills Hatchery appears much as it did upon opening in 1958. Later construction efforts transformed it into the state's largest hatchery and one of the largest coldwater hatcheries in the nation. The facility produces over 400,000 pounds of trout a year.

year before impoundment. A modern facility, it provided trout not only for Lake Taneycomo but also for other trout fisheries around the state. It has a visitor center that hosts many thousands of visitors each year.

Taneycomo became our first trout lake, and further research led to introducing amphipods and isopods ("freshwater shrimp") into the lake as a natural trout food that helped produce especially desirable fish.

Daily fees were initiated at the trout parks in 1938, which defrayed most costs of the put-and-take fishing operations, but at Lake Taneycomo charging daily fees was not possible. To offset costs an annual trout license was initiated in 1962, later to become a trout stamp. Funds from this have helped defray costs of trout fisheries throughout the state. Focus of trout operations goes beyond the parks to trout management areas on springfed streams, some featuring trophy fishing—sometimes catch-and-release. Trout hatcheries now also rear brown trout for some of the areas.

Warm water hatcheries have changed operations drastically as well. Where once their main production was destined for the burgeoning farm pond program and Department-built lakes, now they have shifted emphasis to raising fish such as muskies, striped bass, walleye, paddlefish, channel catfish and some hybrid species for stocking into public waters. Missouri hatcherymen pioneered in the hatching and rearing of channel catfish



Even in 1944, Roaring River State Park attracted a crowd of anglers on opening day. Roaring River first opened to trout fishing in 1932.

which go into public waters.

Warm water hatcheries still operate substantially under the policy formulated in 1948: hatchery-reared fish are available to establish populations in new waters, to replace fish where they have been exterminated by unnatural causes such as pollution, to assist in correcting an unfavorable balance between predator and prey species, to introduce new species into existing water, and to provide channel catfish for the popular "put, grow and take" state lakes fisheries.

Where once it was thought that hatcheries would eventually be abandoned, it is now recognized that they remain an important part of the fisheries management picture. They are no longer seat-of-the-pants operations, but run by professionally-trained personnel, with special expertise in nutrition and pathology. As a result, they produce many more and healthier fish than the old timers could even have imagined. The services and know-how of these professional fish culturists are made available to private hatcheries and landowners as well.

Comparing modern hatchery operations with those of days gone by reveals a stark contrast. The days of gathering and weighing fish by hand, putting them into milk cans and transporting them in the back of a truck or via the old railroad fish car, "Benton," are long gone. Ultra-modern equipment is now used to process, count, weigh and move fish to aerated vehicles for transport. There still remain many hand operations, in cold, disagreeable conditions, but no one would willingly go back to the "good old days."

Along with the growth in fisheries research and hatcheries there arose a need to provide management of fish populations on private waters. The first contact usually was the conservation agent. If it was a minor



The introduction of muskellunge to Missouri waters was another Fisheries success story. Muskies like the one held here by Larry Belusz have added size and variety to sport fishing in the state.

problem he might handle it or the Field Service agent might be called in. But it soon became apparent that this was an area that needed the knowledge and assistance of trained fisheries people on a continuing basis.

Department-built lakes began to have problems, too, from weed problems to overfishing. The August A. Busch Memorial Wildlife Area near Weldon Spring, opened to fishing in 1950, was the first major fishing installation. It featured many small lakes that were heavily fished—100,000 fishing trips per year. They needed constant attention, and as the Community Lake Program got into high gear after 1958, those lakes also needed attention.

The first full-time management specialist rose from the ranks of conservation agents. Gilbert F. Weiss spent weekends and evenings (often the only time a pond owner could get together with him) figuring out the problem and recommending solutions. Eventually, more management personnel were added—John Goddard and Jack Hoey were among the first management biologists—districts were carved out, and a management section created.[7] Its job was, and is, to apply the information research has gathered to private and Department waters. There are presently seventeen management districts and forty-five management biologists and specialists scattered over the state. Passage of the Wallop-Breaux amendment in 1985, which tripled funding under the federal aid to fisheries Dingell-Johnson Act, has made possible increases in fisheries management personnel.



This Callaway County farm pond demonstrates recommended planting and fencing patterns for attracting wildlife. Cattle are watered at the tank beneath the dam.

Additional management staffing will permit annual sampling of fish populations in nearly all public impoundments, resulting in better, more intensive management and improved fishing in some 300 lakes. Owners and users of private lakes will benefit from the expansion by sampling of about 500 private lakes each year to advise owners on better

[7] Fisheries Management Section chiefs have been C. A. Purkett Jr. (1962-1964), J. P. Fry (1964-1967), Lee C. Redmond since 1967.

management. In addition, private pond management duties previously handled by Wildlife Division's field service staff were transferred to Fisheries Management Section in 1986. This will result in about one thousand additional private ponds per year receiving better management.

An innovative and comprehensive approach is under way with some of the new funding to solve a vexing problem—the steady decline in fish habitat quality in streams. By the 1980s, channelization, floodplain development and inappropriate land use had resulted in destruction of riparian forests, eroding streambanks, stream channels choked with excessive amounts of sand, silt or gravel, and altered fish population structures.

In 1986, statewide efforts were begun in each fisheries management district, utilizing the services of two stream management biologists and their staffs, plus support from stream research biologists, to bring a fresh and unique approach to stream management. This multi-pronged approach involves a public awareness campaign, stream management demonstration areas, technical assistance to landowners and other agencies, coordination with other agencies to ensure that stream and big river efforts complement one another, and continued analysis and research of stream ecosystems and their use. This program is directed toward combating abusive stream practices and to provide suitable alternatives, as well as to bring stream fisheries into scientific management.

This area of fisheries work will play an important role in the enhancement and maintenance of fishing opportunities of the future.

The Department's public lakes program began in 1950, when August A. Busch Memorial Wildlife Area opened to fishing, followed by Lake Paho in 1951. Between 1950 and 1976, the Department acquired thirty-six lake areas in thirty-two counties. The Community Lake Program began in 1958, with Jamesport Community Lake in Daviess County. Under this program, the Department would build and maintain a lake if the local com-



Fishermen enjoy an afternoon's recreation at Lake Paho—the first lake to be built as part of the Department's public fishing lake program. It opened in 1951.

munity purchased the land. Nineteen lakes were constructed under this program. Following passage of the conservation sales tax in 1976, the Department changed the policy, waiving the requirement that the community purchase the land for public fishing lakes.

Since 1977, the Department has purchased five existing lakes and eleven lake sites, which together will total 980 acres of fishing waters when all are developed. In 1980, the Commission approved creation of a Community Assistance Program which permits the Department to enter into agreements with municipalities or other agencies to make their lakes available for public fishing. The Department's role is to develop public use facilities—roads, parking lots, boat ramps, privies—and to manage the lake through stocking, regulation and enforcement. At this time, there are fifteen lake areas under this program, with 1,950 acres of water providing close-to-home fishing.

In 1958, St. Louis sportsman Ross E. Stones donated some land on Big Piney River for the Department to develop as a free public fishing access. This was the beginning of a program that grew to embrace not only stream access, but streamside recreation in all its aspects. The three types of properties acquired by the Department include canoe and boat launching areas, frontage areas usually on small streams, and larger multiple-use areas on streams or rivers. Between 1958 and 1977, the Department had acquired 109 sites on floatable streams. Since passage of the conservation sales tax it has added 111 stream areas in seventy counties through purchase, lease or donation. Of this total, fifty-four are small canoe or boat launching sites, forty-seven are stream frontage areas and ten are multiple-use areas. The aim is to have some public access at least every ten miles along major recreation streams.

Fisheries was only a small section within the Fish, Game and Forestry Division in 1937, with only fourteen employees including the chief, Dr. G. B. Herndon.[8] It grew slowly until passage of the Dingell-Johnson Federal Aid to Fisheries Act of 1951. In the reorganization of 1964, it became a separate Division of Fisheries organized into four sections: hatcheries, research, management and special use areas. The latter manages public areas where fishing is a prominent feature.[9]

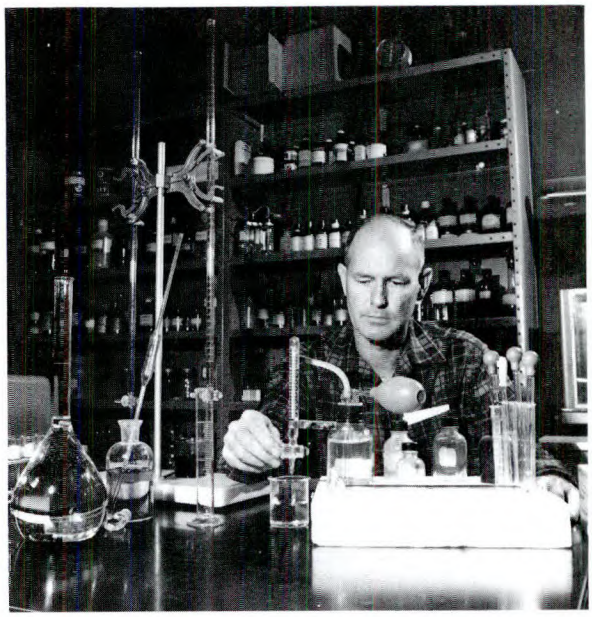


There's nothing like a stringer of fish to light up the eyes of a child. Kids' Fishing Day, now an annual event, introduces youngsters to the fun of fishing.

As an indication of the growth of fisheries knowledge and complexities since the days of dumping "California salmon" into the Missouri River, there now are 197 people in Fisheries Division including clerical support, with specialties the founding fathers never dreamed of. Besides fish culture aids and fisheries specialists, there are computer scientists, biometricians, an aquatic entomologist, naturalists and fish pathologists—all endeavoring to manage aquatic wildlife resources in Missouri.

[8] Fisheries Division chiefs have been Dr. G. B. Herndon (1937-1959), P. G. Barnickol (1959-1964), Charles A. Purkett Jr. (1964-1978) and James P. Fry since 1978. Assistant Division chiefs were P. G. Barnickol, C. A. Purkett Jr., J. P. Fry and since 1979, Stanley M. Michaelson.

[9] Special Areas Section chiefs have been A. Reed Twichell (1952-1965), M. LeRoy Heman since 1965.



Dr. James R. Whitley, superintendent of Fisheries Research, is credited with making the Department's water quality unit one of the finest in the country.

Advances are not as obvious as the comeback of deer and wild turkey, but are just as spectacular in a quiet way. Where once there was essentially no bass fishing in north Missouri, now it is common. There now are muskellunge, tiger-muskies, striped bass and striped-white bass hybrids in Missouri waters. Hundreds of thousands of farm ponds dot the Missouri landscape, most offering good fishing near at hand. The quality of stream fishing has been brought back from the drought days of the 1930s, and streams support good fishing despite increased pressure. Missouri cities now have urban fishing programs, leading the nation in this activity. The thousands of acres of new fishing water created by flood control and power reservoirs are being carefully managed to maintain fishing as good as any in the nation.

Problems still exist, especially maintaining water quality in the face of modern society's dependence on chemicals harmful to fish. Missouri badly needs an overall water policy to protect its waters. Until it adopts such a policy the Fisheries Division, with help from the Department of Natural Resources, remains on the front line against further degradation of Missouri waters.



Pollution, the ever-present threat to fisheries, looms on the horizon as a challenge to Fisheries personnel. Here, Frank Ryck holds a fish killed by pentachlorophenol which leaked into the Big Piney River from a nearby wood treating plant in December, 1973.

Forestry Division

It is an old rule of thumb that it takes forty inches of rain to grow trees. Like all such rules, it is an oversimplification, but if you look at a map of the United States you will find that the great prairies and the eastern deciduous forests essentially come together along the forty-inch rainfall line, which lies right across Missouri. Much of northern and western Missouri was prairie in pristine times, much of eastern and southern Missouri was forest—that area we generally refer to as the Ozarks. The forests and the Ozarks are inextricably bound together.

It is difficult to recall, when driving through the Missouri Ozarks these days, exactly how the tree-girt hills looked fifty years ago. Old timers, searching their memories, remember especially two things: rocks and broomsedge. The hillsides were white with exposed rock, among which a few scraggly trees stood. These things were the symbols of a century of abuse and they were everywhere.

Even thirty-five years ago one could see fence rows filled with rocks that had been laboriously carried by the farmer off his fields. Or perhaps there were huge piles of rocks in one area of the field. The soil, never very deep or very fertile, had been washed off the



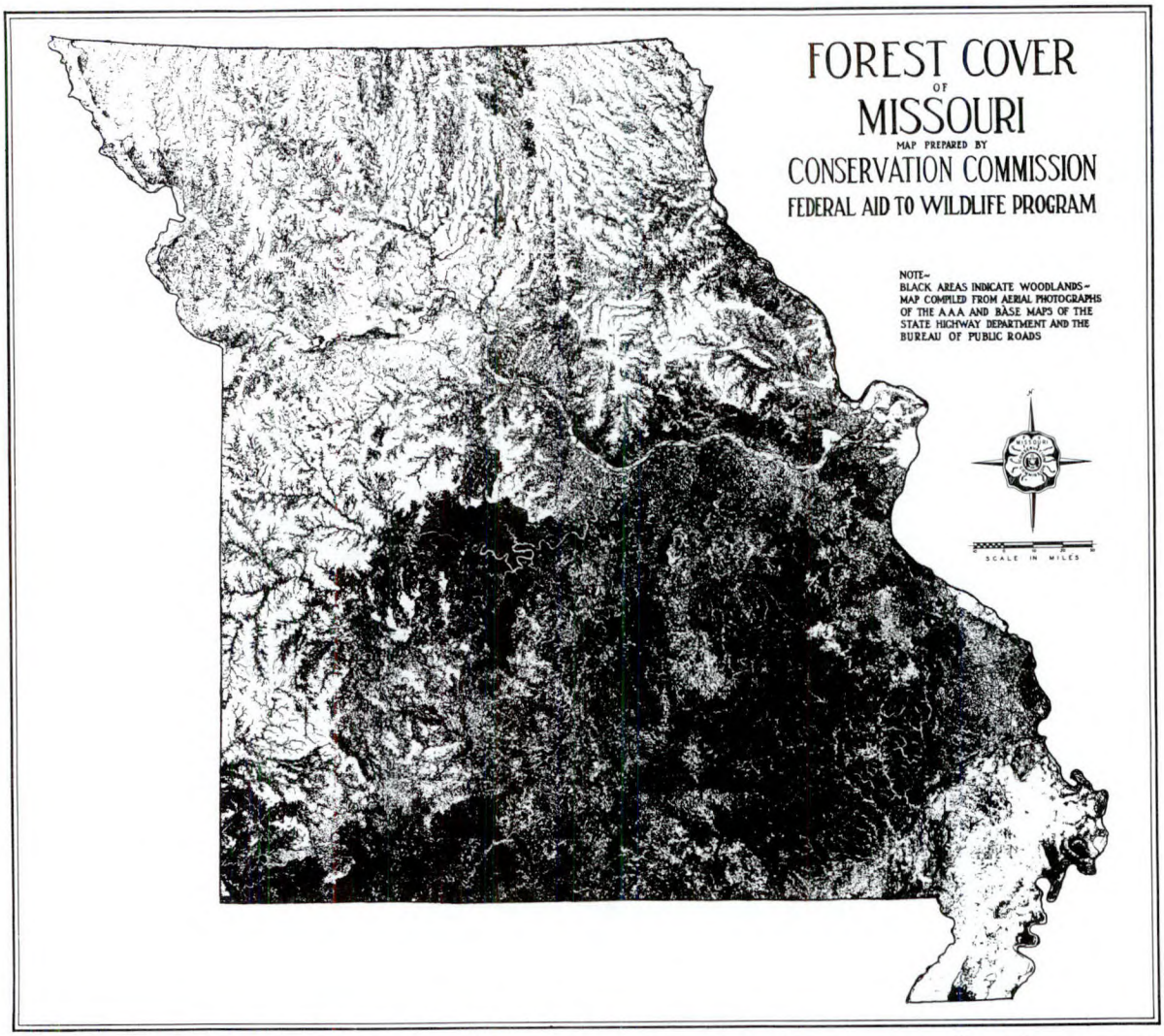
An effort in 1941 to halt erosion led to widespread planting of black locust, whose roots anchored fragile soil.

slopes to choke the steams below, leaving the bare bones of the Ozark hills as rocky reminders. What fertility existed in the thin soils was also gone, and the old crops were replaced by broomsedge, the indicator of worn-out Ozark soils.

Historical writings tell of majestic forests, open enough beneath the towering trees to drive a buggy through them. In 1857, Father John Joseph Hogan, trying to locate some land in the eastern Ozarks where Irish immigrants might settle, rode horseback without too much difficulty from south of Ironton to the area that is now Carter and Oregon counties. The area where that settlement started is now referred to as the Irish Wilderness.

It was a mature forest, its canopy closed to shade out the ground below, so understory plants had a hard time growing. Wildlife associated with mature forests include bear, wild turkey and passenger pigeon. Old accounts telling of large populations of deer would indicate that not all the Ozarks was closed, mature forest, because deer need what biologists call "edge," with plenty of browse to thrive.

Not all the Ozarks grew large trees or wildlife. Henry Rowe Schoolcraft wrote of journeying across the Ozarks from Potosi to

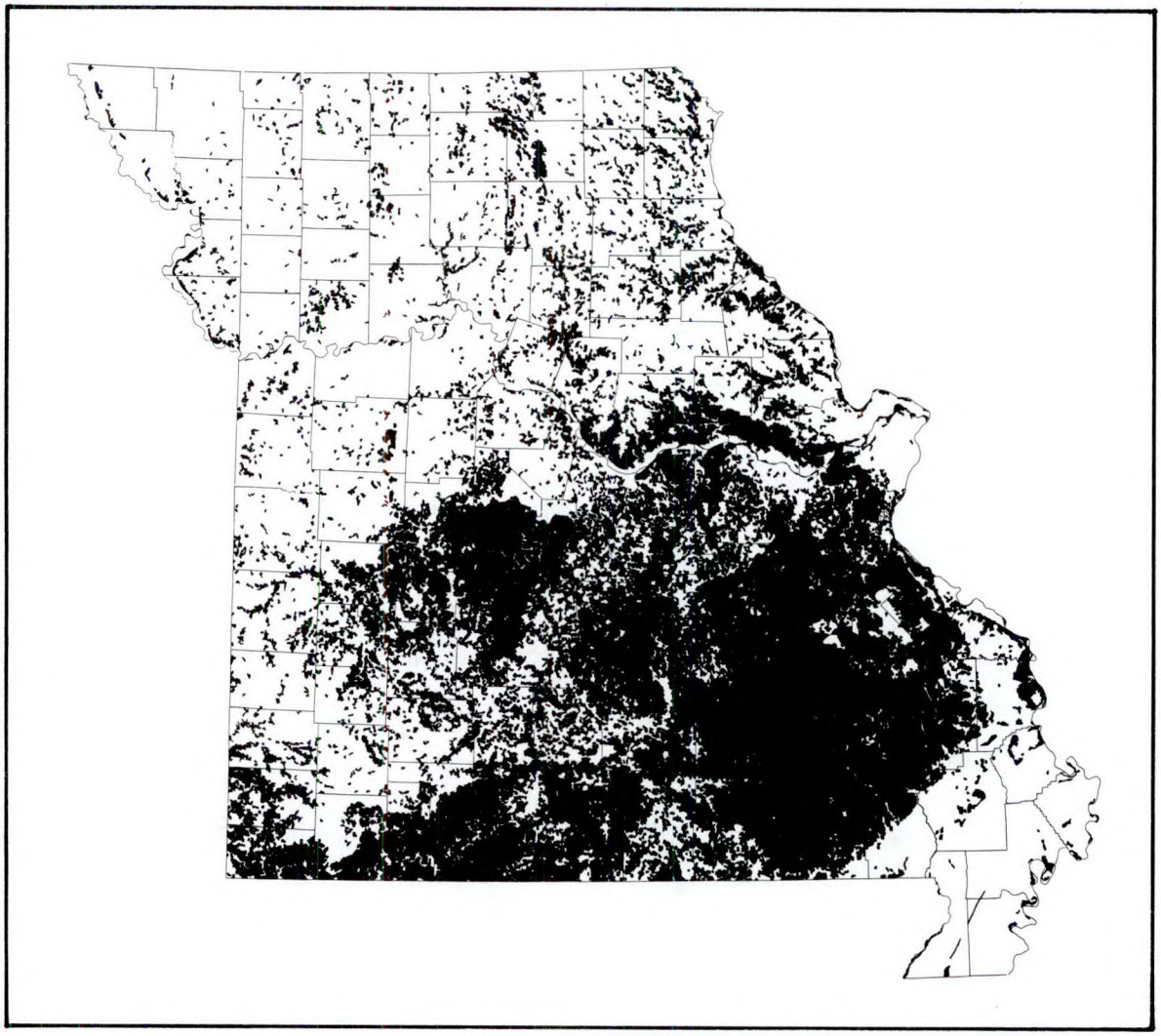


A 1942 Forest Cover Map shows the decline in forests from presettlement times, when about seventy percent of Missouri was forested.

the White River country in 1818. He found large expanses of oak brushlands where he nearly starved as he tried to live off the land. Usually these brushlands were on soils underlaid with a clay pan that prevented trees from attaining much growth. They are not productive forest lands even today. In general, the heavily forested areas of the Ozarks were the hillsides and bottoms. Much of the uplands were more open, with "balds" and even prairie stretches in places, according to early survey notes.

The central Ozarks was among the last land to be settled, but even before the 1850s, hardy pioneers were subsistence farming along the rivers, and trapping and hunting to eke out a living. The timber was essentially worthless because of the distance to markets and was used only for cabins, fences and fuel. Livestock was permitted to run at large in the woods, to feed on the abundant mast.

The Indians annually burned some of the Ozarks to improve conditions for hunting and the settlers continued the practice, to improve grazing, and to keep down snakes, ticks and chiggers.



The state has lost over half its forests since presettlement. Satellite imaging was used to make this 1986 Forest Cover Map which shows noticeable declines in forest areas in the Bootheel, St. Louis County and southwest Missouri.



Livestock roamed at will during the days of open range, which persisted longest in the Ozarks. Here goats and hogs freely explore a county roadside.

Exploitation of the timber in some of the Ozarks adjacent to the larger streams, such as the Gasconade, began as early as 1818. Timber was cut and floated down the Gasconade to the Missouri River and to St. Louis. By 1852, the Gasconade Valley was considered "cut over."

Timber cutting in the mid-1800s was two-thirds pine and only one-third hardwoods. By 1909, this had shifted to seventy-three percent hardwoods, as the major pine woods had already been cut off.

It wasn't until the late 1800s, with the coming of railroads, that lumbermen began exploiting the deep Ozark forests.[1] They cut the better hardwoods and a major part of the pine, extending railways back into the hills and floating great rafts of logs out of

[1] The forests around Potosi and the eastern Ozarks from the Mississippi River to St. James were cut off by the mid-1800s for charcoal used in smelting lead and iron ore.

the hills on the rivers. The hill men became timber cutters and for a brief span a whole way of life grew up around the tie rafter, who lived aboard his moving mass of railroad ties that floated down the rivers to rail points.

The sawmill at Grandin in Carter County was said to be the largest lumber mill in the state, possibly the nation, in 1887. Three lumber companies, between 1888 and 1903, cut a total of 1.3 billion board feet of lumber. In those days they cut only trees fourteen inches and larger, and only to the first limb—"high grading" it was called. When the great mills closed down they left the people who, trying to eke out a living, further impoverished the land. The Ozarks reached its highest human population levels when the lumber mills were at full operation.

The combination of timber harvest, large numbers of free-roaming livestock and annual burning had a major effect on Ozark soils, streams and, of course, wildlife. Forest wildlife was hunted year-round and it dwindled as the forests were cut over and competition from livestock reached a peak. By the 1930s, only about 2,000 deer were thought to exist in the state and turkeys declined to a few thousand birds in scattered flocks. For all practical purposes, bear, ruffed grouse and passenger pigeons ceased to exist, and most other species were in dire straits.

All that, of course, has changed. Now, the Ozark hills are covered with trees and the streams again run steady and clear. So successful have been the forestry programs that we have created "wildernesses" of what once were nearly barren hills. Anyone who can remember what the Irish Wilderness looked like fifty years ago will smile at calling this a wilderness. Its "pristine" look today is the result of a lot of hard work in stopping fires and upgrading the existing timber.

Forest wildlife has come back to the Ozarks to a point where it can easily become a nuisance if not carefully controlled. Improved pastures have replaced the tawny fields of broomsedge. The story of this comeback is a tribute to those who worked so long and with such dedication, in many ways, to heal the scars of a century of forest rape and ruin.

Elsewhere in Missouri the forests had a different (but just as devastating) history. Around settlements, forests were cut off for homes, fences and firewood. When the steamboats came after 1815, they utilized tremendous amounts of wood for fuel, and forests close to rivers were quickly cut off. The expansion of railroads after the Civil War created a demand for both fuel and ties. After forested areas on the fringes of the Ozarks were cut over, lumber companies penetrated the Ozarks to exploit forests there. Missouri's last forest area to be cut was the great swampland of the southeast.

The restoration story begins in 1924, when Congress passed the Clarke-McNary Act, which offered federal funds to states with forestry programs. The next year the Missouri legislature created an office of state forester (Frederick Dunlap) within the Department of Agriculture and appropriated enough money to hire one district forester, Paul Dunn.[2] A forest fire protection district was set up in Reynolds County. Forester Dunn recalls climbing a lookout tower one spring day and seeing fire at all points of the compass. Controlling fire seemed a hopeless task.

In 1931, possibly because of the Great Depression, the legislature neglected to appropriate any funds for forestry. The forestry division was abolished and the state forester, Frederick Dunlap, resigned in despair. An official report signed by him concluded that it was impossible to establish forest fire control in the Ozarks.

There was no forestry program in Missouri for a number of years, but a group called the Missouri National Forest Association successfully lobbied a bill in 1929, which was enabling legislation to permit the federal government to acquire land in the state for a national forest.[3] It restricted the acreage that

[2] Dunn later went on to a distinguished career as dean of the forestry school at Oregon State University, a vice-president of St. Regis Pulp and Paper Co., and president of the Society of American Foresters.

[3] In 1911, Congress had passed the Weeks Law, permitting the U. S. Forest Service to set up national forests in the eastern, central and southern U. S. This did not affect Missouri until the state passed a law permitting the federal government to acquire lands.



A Maries County hillside cut over for grazing in 1946.

could be acquired in any one county, so purchase units were drawn up that included the corners of several counties in order to purchase large enough blocks of land to be practical. This restriction was later removed.

Eight purchase units were set up in 1934-35—the eastern four made up the Clark National Forest and the western four made up the Mark Twain—and the national forests became a reality.[4]

When the new Conservation Commission was created in 1936, it was a wise decision of the founding fathers to include forestry in the constitutional amendment. Sydney Stephens credits J. T. Montgomery, who broadened the outlook of those drafting the amendment to look beyond hunting and fishing. It was a master stroke to revive state forestry and bind it inextricably to wildlife and fisheries, which ensured its future. There was no way forest wildlife could be brought back without control of wildfire, so a forestry program was essential to a wildlife program in the Ozarks.

In March, 1938, George O. White was hired from the U. S. Forest Service to be state forester. He saw that the first thing that had to be done was control fire. To help accomplish that he needed an educational program to make landowners aware of the economic potential of their woods. He would need nursery stock to get trees planted for reforestation, and a system of timber management. What was necessary was evident, but it would be years before his vision would bear fruit.

On the 27th of June, 1938, he hired the first four graduate foresters to begin the "impossible" task of controlling forest fires on both private and public lands in the Ozarks. Four protection districts were organized:

Meramec District, 435,490 acres, headquarters Sullivan, under William E. Towell; **Sam Baker District**, 424,490 acres, headquarters Piedmont, under Arthur B. Meyer; **Lake Ozark District**, 473,720 acres, headquarters Camdenton, under Edward J. Seay; **Eminence District**, 623,890 acres, headquarters

[4] National forests in Missouri have undergone several name changes. All national forest holdings in Missouri are now Mark Twain National Forest.

Eminence, under August H. Schmidt.

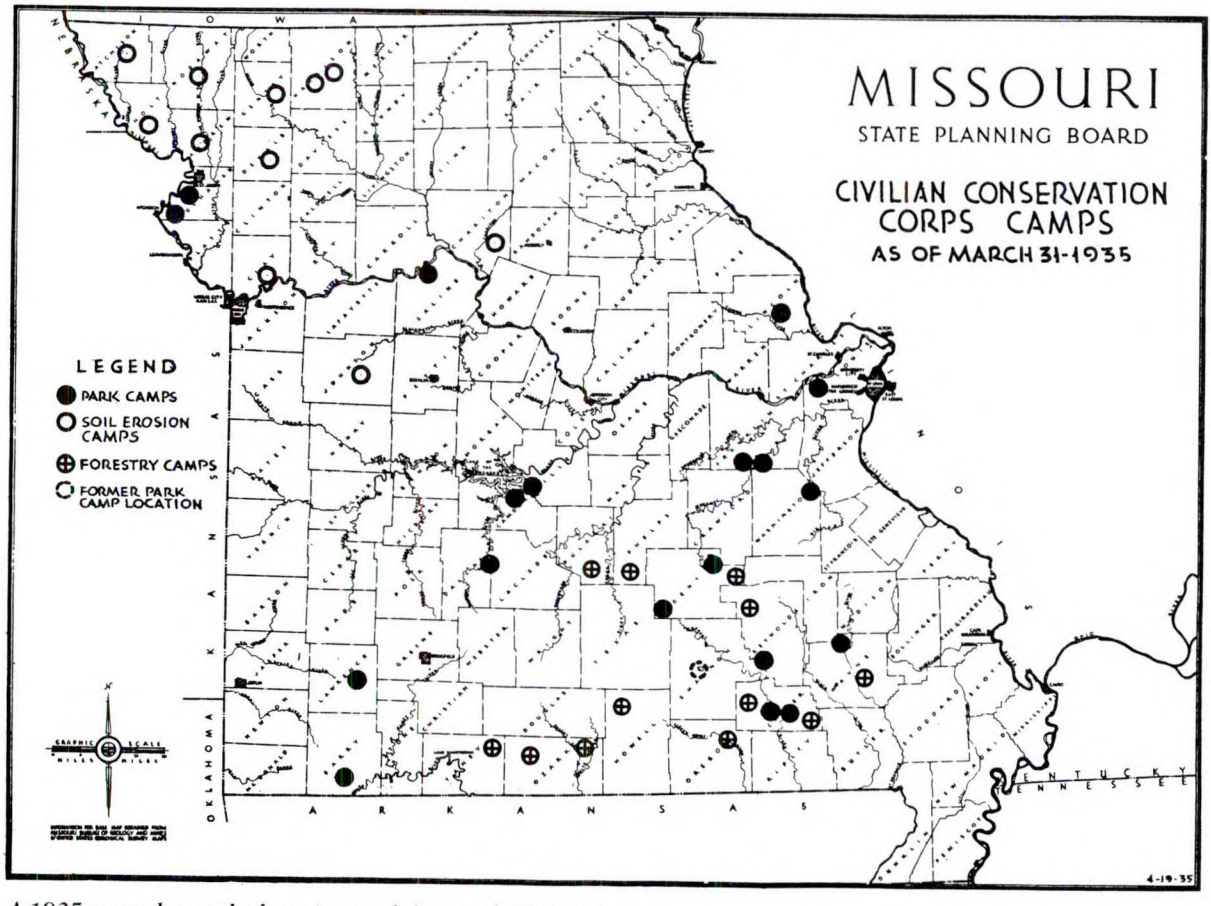
A fifth district, **Deer Run**, 422,440 acres, headquarters Ellington, under Charles Kirk, was established a few months later.

The forestry budget was limited to fifteen percent of the Department's revenue, and in 1938 this only amounted to $15,799. At first the fledgling foresters couldn't hire firefighters and had to seek volunteers to help control blazes that swept their districts. Where there were CCC camps, enrollees were of great help. But in many places fires had to be ignored while puny efforts were expended on protecting lands of cooperating landowners.

There were few lookout towers in those days. When a U. S. Forest Service inspector told George White that more were needed, White answered, "We are not able to fight all the fires that our towers are reporting now!"

The unsung heroes of the early days of fire fighting are the lookout towermen who actually fought the blazes. Hired locally, they faced an uphill battle against public sentiment and the fires. Yet they conscripted help when they could—fought alone when they could not—armed only with broom rakes and back packs. When they weren't fighting fires they were arguing with their neighbors, trying to convince them that the woods were worth protecting. For all this they were paid only $50 a month, but they were provided with two-bedroom houses adjacent to their lookout towers at nominal rent, and a pickup truck. They managed a living by keeping a few chickens and maybe a cow or pig.

In the days before two-way radios, foresters got word of fires by rural telephone—never too reliable—and occasionally by mail.



A 1935 map shows the location and duties of CCC camps.



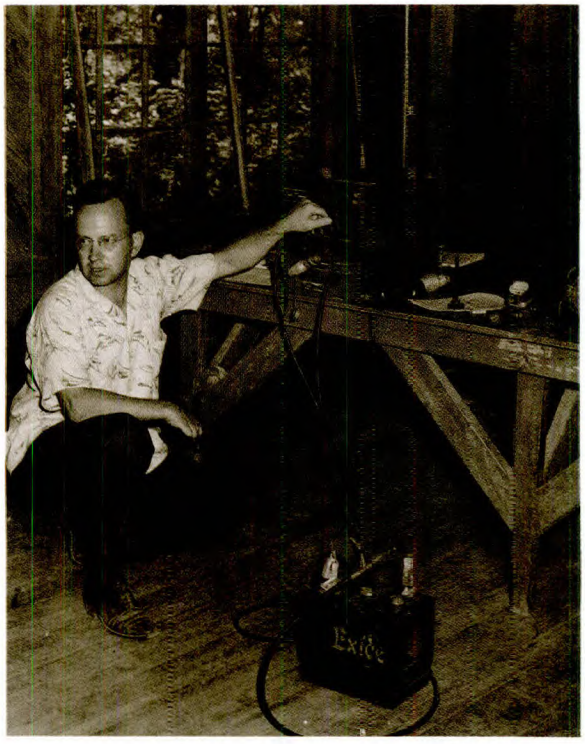
Lookout towers were tools of the trade for foresters determined to control wildfires. The Goodman Tower, first built of wood in 1948, was replaced with this steel tower in 1959.

One old forester recalls getting a post-card from a forester on an adjacent district that read: "This is to inform you that you have had a fire burning on Range so-and-so, Township so-and-so, since last Tuesday."

Even when two-way radios became available they were unreliable old models. To use one you put it on the tailgate of your truck, attached a wire antenna, tied a rock on one end of the antenna and threw it over a tree limb. Then, perhaps you might be able to reach another forester a few miles away. In the excitement of a hot fire, you might hastily drive off in your truck, leaving the radio dangling from its antenna. It happened, more than once.

Obviously the new foresters had to educate the public if they were to be successful. They spent as much of their time as they could spare visiting landowners. They attempted to "sell" them on the worth of fire control and solicit their cooperation in controlling fires, so some form of timber management could be applied. It was not an easy job to offset the habits of generations. One "educational" technique used was to hire high school boys as fire crews. They got a lot of education at the end of a broom rake.

In 1938, White sent a panel truck into the field with an electric generator to show motion pictures on fire prevention. In those days the REA had not yet penetrated the deep



The two-way radios of the 1940s were clumsy, unreliable devices, but heralded the age of modern communications foresters now enjoy.

Ozarks and folks came from miles around to see the movies. The Showboat succeeded in securing public understanding and support and continued in use until the 1950s. Still, it took a number of years before much headway was made. Spring burning continued to be a nightmare for men on the districts, who fought fires round the clock time and again. Fire laws might be enacted, but few Ozark juries would convict a woods burner, who might be a relative or neighbor of the judge and jury. Only time and education would bring this about.

It wasn't until December, 1940, that a separate Forestry Division within the Department was created. The Division grew slowly as more funds became available from the Department and federal assistance. The first real break came in 1946, with the passage of the State Forestry Act. There had been growing concern about the use of hunting and fishing license revenues as a major source of forestry funding. In the annual report for 1943, George White wrote: "If the Conservation Commission is to carry on a forestry program equal to the importance of the resource, it must have funds from the people of the state to supplement monies provided by hunters and fishermen."

Over ninety percent of forests were small tracts in private ownership. White believed that these landowners needed some incentive if any headway was to be made in securing sound forestry practices. The Sixty-third General Assembly agreed, and part of the State Forestry Act provided for an owner to classify timber tracts as "forest cropland" for a period of twenty-five years. The incentive was to lower and defer annual taxes during that period if the landowner agreed to control fire, combat timber theft and practice good timber management.[5] The Act also provided for reimbursing the counties for lost revenue on classified lands. Funds for this were made available through the Forestry Division from general revenue. The first year, fifty-one owners classified 23,587 acres under the program.

In recognition of the importance of sound forestry practices to the state's economy, the legislature began to appropriate funds from general revenue for forestry purposes—$150,000 in 1946-47. The additional monies accelerated forestry programs. By 1946, there were seven fire protection districts covering three million acres in twenty-two counties. There were agreements with 3,116 landowners who owned 1,098,648 acres of private lands. In addition, there were six farm forestry districts. Forest fires had burned three percent of the protected lands that year, and sixteen million acres remained outside protection districts.

But progress was being made. By 1955, it became evident that a way of life had changed in the rough Ozark counties. Fires had been reduced to one percent of the protected areas. People began to notice the

[5] Timber theft (or "grandmawing," as it was called from the practice of telling mill owners that stolen timber sold to them came from "Grandma's place,") was believed to be second only to fire as a deterrent to private forestry development.



One way to educate residents not to burn the woods was to hire high school boys to fight fires. This 1943 photo shows one such crew with Forester Robert O. Danson. Danson was in charge of the Meramec fire protection district and went on to manage the nursery at Licking.

recovery of the Ozark forest due to fire control. Many of those who advocated burning in 1938 were now staunchly against it. It was possible to get convictions in the courts for fire setters. By 1967, there were thirteen fire protection districts embracing ten million acres. The "impossible" had been achieved.

In 1961, the Forest Service increased funds to states to further expand services in the areas of utilization and marketing. Because most timber management that is accomplished on private lands is done through timber sales, the utilization and marketing specialist was available to coordinate and broaden the farm forester's knowledge and efforts in marketing. In addition, a major effort was made to assist forest products industries with better utilization and marketing. This began as a one-man operation but was expanded to the present four-man staff in the late 1970s.

Today the entire state is covered by seventeen forestry districts. Woods fires still occur, but they are fewer and the acreage lost is but a tiny fraction of the acreage under protection. Lookout towers that once dotted the landscape are gradually disappearing, their usefulness a thing of the past. A first line of defense in many areas now are rural fire departments. Since 1964, the Department has provided equipment and training to these firefighters, the equipment made available through the Department from military surplus. The Department and federal government each put up $100,000 annually toward training and development of rural fire departments.

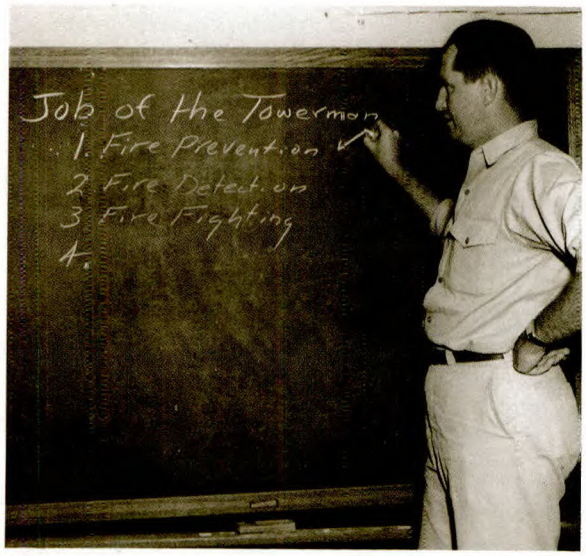
In 1939, the Soil Conservation Service proposed establishing farm forestry positions

to help landowners manage their woodlands better and the next year Arthur B. Meyer became the state's first farm forester at Warrenton. His salary was paid by the SCS and his expenses by the Department. A short time later William E. Towell became farm forester at Kirksville. It was another effort to educate Missouri landowners about the worth of their timber.[6]

During 1942, Congress passed the Norris-Doxey Act as a wartime measure, authorizing the Forest Service to start its own farm forestry program. Costs were shared equally by the states and the federal agencies. As a result, two new projects were begun, this time in southern Missouri. In 1946, the Forest Service took over administration of all such projects, and by 1950 there were twelve farm forestry projects in the state. Under the Norris-Doxey Act farm foresters could work only with woodland owners, but in 1951, Congress passed the Cooperative Forest Management Act that authorized them to also work with manufacturers of forest products and on state lands. This greatly expanded the farm forestry program.

With wildfires finally under control it was important to upgrade the quality of Missouri forests. A 1949 survey had shown that two out of five trees in the state were culls and the rest young growth. Farm forestry programs set to work to clean out the culls—by sales, if a market could be found for the products. This gave a boost to the charcoal and pallet industry. Landowners got help in woodland improvement through the Agricultural Conservation Program, a federal cost-sharing plan.

Today farm foresters are called resource foresters and there are thirty-eight of them providing free services to Missouri timberland owners in all parts of the state. They also manage timber on state lands and work to bring forest products manufacturers together with timber growers. They work closely with others in the Department so their management plans also provide for forest wildlife and recreation.



William E. Towell, assistant state forester for fire control, instructs a course for Forestry Division employees in 1951.

When the Forestry Section began functioning in 1938, it had inherited about 34,000 acres of forest lands. These were lands purchased to become state parks, using hunting and fishing license money. None of the timber lands in the Shannon-Reynolds-Dent counties area had any park development. Their chief function had been as wildlife refuges and in the early years they played an important part in deer and wild turkey restoration programs. State Forester George O. White undertook to build a state forest system and gradually acquired lands that were used as demonstration areas of what fire suppression and good timber management could do.

Sale of timber from state forests helped provide jobs and aided the local economy. The first timber sale from state forest land followed a disastrous Easter Sunday fire in 1941. That day's fires may have been the worst in Missouri history. It was estimated that perhaps a third of the Ozarks burned that Sunday, with a great loss to buildings as well as woods. The timber sale was a salvage operation and the volume harvested amounted to 405,000 board feet of saw timber and 5,485 feet of stave bolts that netted the De-

[6] It may seem odd that the first farm forester positions were in north Missouri, but this was because the SCS had no projects in southern Missouri at that time.



Foresters who took a sawmill shortcourse in the fall of 1950 were, front row, left to right: David Bauch, Burl Ashley, Thorne Longsworth, L. E. McCormick, Roy Degler, Carrol Fisk. Back row: Lloyd Grapp, Bob McComb, Les Tschannen, John Kullman, John Wylie, Martin Grau, Bob Raisch, Ed Glaser, Earl Priegel, Dick Holekamp, George Lodge, J. M. Nichols and George O. White.

partment $1,700. Income from state forest timber sales has grown as management provides more and better trees, and helps keep local timber operators in logs, posts and poles. Cuts are made with due consideration of wildlife and esthetic values as well. Income from state forests also comes from mineral exploration.

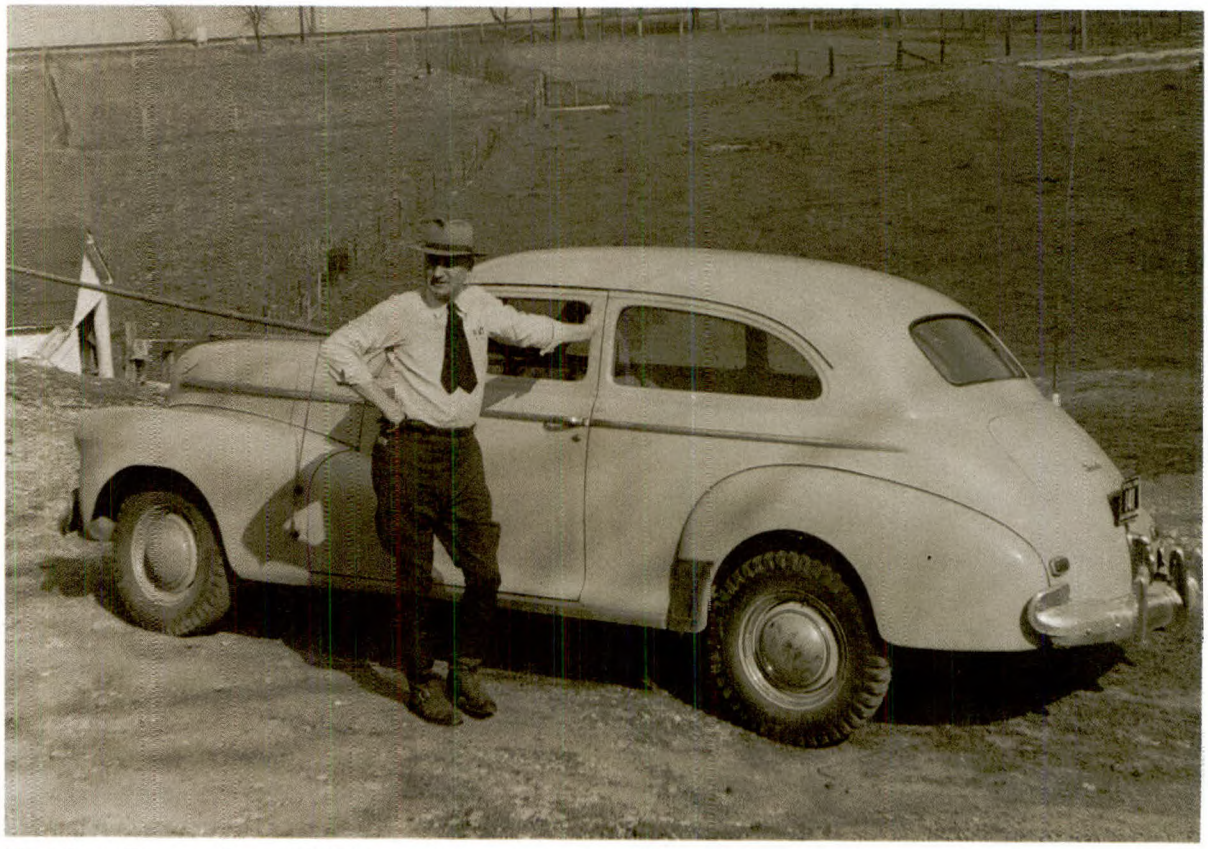
As state forest holdings increased over the years,[7] they joined the national forests in providing free public recreation—hunting, fishing, hiking, camping and nature study.

White believed that if landowners could be induced to plant trees—and there were a million acres that needed trees to be more productive—it would help prevent woods fires. Nothing can anger a landowner more than to see trees that he laboriously set out by hand swept by wildfire. A nursery was started in 1940, adjacent to Meramec State Park on lands retained by the Conservation Commission, and in 1942 the Department took over operation of the Forest Service nursery at Licking. Robert O. Danson, a forester for the CCC in the 1930s, became the first nursery chief.[8]

An agreement was drawn up with the University of Missouri's Extension Service whereby county extension agents would take seedling orders on forms provided by the Department and transmit them to the state forester. Shipping orders were sent to the nursery, the seedlings bundled, and delivery made to a central point in each county at

[7] State forest acreage now totals nearly 300,000 acres. Efforts since 1977 have been to acquire holdings close to metropolitan areas to make forest recreation available to more urban dwellers.

[8] Danson served from 1942 to 1961. He was followed by Delbert G. Mugford, who retired in 1982. William G. Yoder now heads the state forest nursery.



First State Forester George O. White at DuPont in April, 1946.

planting time. Nowadays, landowners may pick up order forms from extension offices or district forestry offices and send them directly to the nursery. Deliveries are made via UPS directly to the landowner.

At first, seedlings grown in the Meramec and Licking nurseries were for reforestation and windbreak plantings, but these varieties were increased to meet wildlife needs. The first year of distribution, 628 landowners ordered 1,055,000 seedlings. By 1967, some 42,381 wildlife food and cover plot bundles, containing 13,321,400 seedlings, were distributed. In addition, nurseries that year produced 86,207,000 multiflora rose seedlings and 3,322,000 shrub lespedeza seedlings, plus mulberry, pecan, pin oak and autumn olive seedlings—all useful wildlife plants. Today the nursery produces about ten million plants annually for an average of 15,000 landowners. Since 1983, the nursery has also been producing prairie wildflowers for use in prairie restoration work.

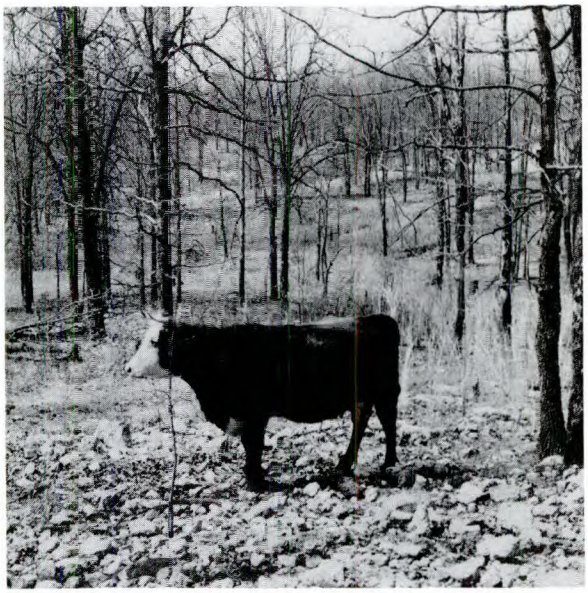
The nursery at Licking has been expanded over the years; the Meramec nursery was closed in 1962. State Forester White retired on January 1, 1960, and the Licking nursery, which he had located and laid out for the U. S. Forest Service many years before, was officially named the "George O. White State Forest Nursery" to honor him.[9]

When White retired in 1960, the things he had set out to accomplish had largely been realized. Forest fire control was no longer a major problem, with less than one percent of protected land burned each year. A strong state forest program was in place, and timber management on both state and private lands was achieved. Open range was on its last legs, to fade away finally in 1969. But forestry couldn't rest on its laurels. Missouri's forests still needed upgrading, though old, fire-scarred

[9] White served from 1938 to 1960. Other state foresters were Osal B. Capps (1960-77), Jerry J. Presley (1977-86) and David D. Hurlbut (1986-present).



The nursery at Licking was officially named the George O. White State Forest Nursery in 1960 to honor White, above, on his retirement.



Open range finally faded from the scene in 1969, much to the benefit of Ozark forests.

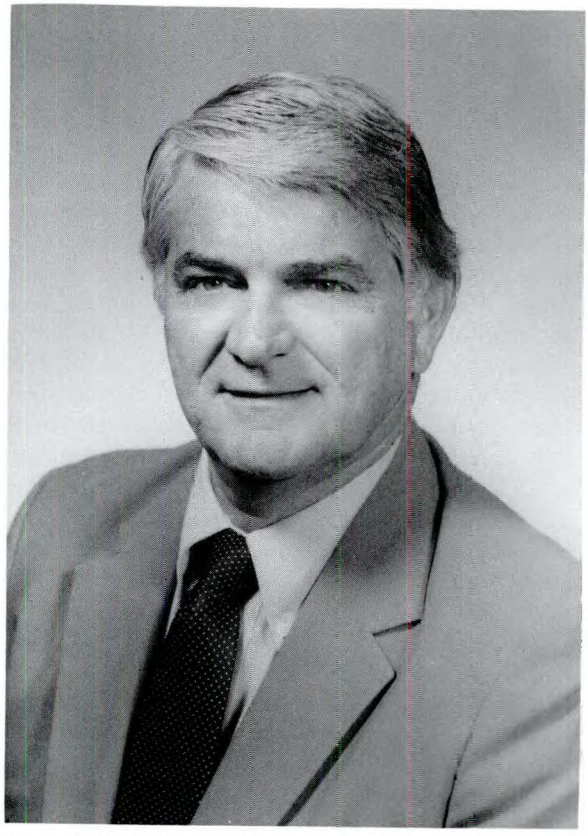
trees were fading from the scene. The state's economy was profiting from fire control and good forestry management, but watersheds still needed protection and education was a continuing effort.

One educational tool that had a profound effect on Missouri youth was an Arbor Day program. Beginning in 1968, seedling trees were given to about one-third of the fourth grade youngsters in the St. Louis schools. This was expanded to include fourth graders in every school in St. Louis and Kansas City in 1972. Since 1980, every year on Arbor Day, every fourth grade youngster in the state receives a seedling tree which he is urged to take home and plant and care for. Arbor Day informational materials are furnished to the schools and many a young adult today looks back with pride on a towering tree in his yard that began as an Arbor Day seedling years before. In 1982, the National Arbor Day Foundation gave an award to the Department for its Arbor Day program in Missouri schools. In 1985, the one-millionth seedling was distributed to a fourth grader in St. Louis.

Forestry Division administration has taken several different forms over the years, reflecting the growth of the program and the gradual changes brought about. After World War II, White appointed two assistant state foresters: William E. Towell for fire protection, and Arthur B. Meyer for timber management.[10] Later, a third assistant state forester position for administration and nursery supervision was created, filled by Gus Hoyer and later by Jerry J. Presley.

To better implement the *Design for Conservation*, Forestry reorganized again in the 1970s, with one assistant state forester, Kerwin F. Hafner, and four supervisory specialists: Robert A. Massengale for marketing and utilization; Eugene L. Brunk for state land management; John R. Kullman for fire protection; and Clell E. Solomon for cooperative forest management. Today, Forestry Division has three major units: field operations, headed by Hafner; staff development and coordination, headed by Brunk; and administration and nursery supervision, headed by Marvin D. Brown.

[10] Over the years, Towell was succeeded by Osal B. Capps, Lee C. Fine and Kerwin F. Hafner. Meyer's timber management post was filled successively by Milton G. "Gus" Hoyer and John E. Wylie.





George O. White created the post of assistant state forester for administration and nursery supervision. Gus Hoyer, right, first filled the position, followed by Jerry J. Presley, left. Presley went on to become state forester in 1977.

Interest in forests has increased and to meet demands Forestry Division has come up with new programs and services. Osal B. Capps, who succeeded White, had a keen appreciation of the public's changing needs in forestry, and he began many new services to meet those needs. Forestry Division now has a full-time forest entomologist and pathologist to assist in problems of forest insects and diseases. A forest geneticist works at developing better specimens of trees. A forest products marketing specialist administers a program designed to optimize markets for Missouri wood products.

To help communities preserve and develop their trees, in 1969 the Department began an urban and community forestry program that provides the services of a landscape architect. It provides training programs for utility company crews on the proper ways to trim trees to protect powerlines. It has foresters assigned to the metropolitan areas and conducts seminars for urban owners of rural forest lands, so they can realize the most from their woods.

The Department has established urban forests—Rockwoods Reservation near St. Louis, Bluff Woods near St. Joseph, Burr Oak Woods near Kansas City and Little Sac Woods near Springfield—so that city dwellers have ready access to forest recreation. It has vegetative management contracts with the Corps of Engineers on all impoundment lands to make campgrounds, picnic areas and even parking lots more esthetically pleasing and attractive to wildlife like songbirds and butterflies.

The ultimate goal in all these endeavors is to make Missouri a green and pleasant place, where its trees can contribute to the health, pleasure and well-being of all Missourians and their environment.

In 1972, it was reported that the state lost one million acres of forests over the past ten years. Aerial spraying of herbicides for



Kerwin Hafner became assistant state forester in February, 1965.





As state forester, Osal B. Capps, top right, initiated forestry programs to keep pace with public need. Among Forestry Division's innovations are urban and community programs and forests like Rockwoods Reservation, bottom left, where Clarence "Salty" Daniel shows off an immature red-tailed hawk to a young visitor in 1969.

creation of pasture land, clearing for agricultural crops, roads and urban sprawl all took their toll on our forests. Much of this loss occurred in the traditional old forests of the Ozarks, but also included the largely agricultural regions of northern and western Missouri. It was a reminder that change is a way of life.[11]

But a 1983 survey of wood-using industries in Missouri revealed that 2,000 firms with 33,000 employees who earned $483 million in wages produced goods valued at almost $3 billion.

Forests will remain an important part of

[11] It is interesting to note that in the 1970s, the largest sawmills in Missouri were not in the Ozarks but in St. Joseph, New Madrid and Perryville.

the Missouri landscape into the foreseeable future. While forest products will continue to be an important part of the state's economic picture, forests now have equally important esthetic and recreational values. The Department has the programs and the people to serve Missourians in the years ahead, thanks to the vision and groundwork by those who achieved the "impossible" in forestry.



In 1986, timber products in Missouri generated $582 million and employed 21,000 workers, a result of the management practices initiated by the Conservation Department fifty years ago.

Protection Division

Imagine that it is 10:30 p.m. and you're sitting in your living room with your shoes off, your feet up on the hassock, and you're waiting for the Late Show to come on television.

You've had a hard day. This morning you walked over a farm with the owner and pointed out to him the places where quail food plots should go, and where he should plant the wildlife bundle you brought to him. You carefully went over the farm plan to increase his quail that you helped draw up.

In the afternoon you patrolled a stream with a fellow conservation agent, dragging for fish traps. It was hard work and you had foolishly scheduled a talk with the PTA that evening and had to do that before you could call it a day. A quiet evening with the family looked mighty attractive when you arrived home a few minutes ago. You decided to just leave the canoe on the car and put it away in the morning.

Then the phone rings. It's a call from an irate lady whose home is near a Department stream access. She's upset about the noise and goings-on, and would you come and put a stop to it?

You drag on your shoes, buckle on your pistol belt and off you go into the night. Alone.

When you arrive on the scene there's obviously a wild party in progress. There's blaring music from the open door of a van. A group of a dozen young men and women are singing and laughing, trash and beverage cans scattered everywhere. It's a situation that modern conservation officers occasionally face.

* * * * * *

But it's not just the bad times—the long hours and confrontations in the dark—that get remembered.

Assistant Regional Supervisor Chester Vermaas retired August 31, 1986, after thirty-one years of service in Protection. In his final monthly report he wrote:

"I hope, in at least some small way, I have been able to contribute something which will make this world a better place for generations that will follow. There has been nothing heroic or outstanding in this struggle, just the simple things such as pointing out the beauty of a prairie coneflower to an eager youngster or sharing a few happy moments with a successful fisherman on the bank of a creek.

"I know I will think back on the times when I listened to the booming prairie chickens at dawn, the gabble of gathering mallards at sunset and the croaking of bullfrogs in the marsh at night. Many things will remain vivid in my mind, such as the thousands of persons contacted at twenty-five Missouri State Fairs, the long vigils on the Osage River shoals, the occasional overturned canoe, the hip boot suddenly filling with icy cold water, the miles of slimy trotlines and the boats filled with tar-covered hoop nets; those walks along the creeks through tall horseweeds well-laced with wet spider webs, those stinging nettles, tick bites, chiggers, mosquitoes and an unforgettable bout or two with poison ivy. I have witnessed the construction of five of Missouri's major impoundments and now enjoy seeing thousands of citizens utilizing those areas. I hope I was able to help get the deer and turkey back in Missouri through enforcement efforts and look forward to the time when river otters, grouse, trumpeter swans, bald eagles, pheasants and other species are much more numerous.

"I will be leaving with a treasure house of marvelous memories. Although there were some frustrations and disappointments along the way, the joy of doing a job which I liked, to the best of my ability, overshadows the bad times."

In any fish and wildlife department, protection or law enforcement has always been one of the basic management tools. The enforcement division usually has the most manpower, and in many places law enforcement



The first comprehensive game law in the state was the Walmsley Act of 1905. Harry R. Walmsley was duly honored as the "framer of our game laws" in this page from Our Fish, Game, Song Birds and Forestry, *a book of sportsmen's clubs published the same year.*

was the major activity of the department until modern fish and game management came to the front in the 1930s.

Missouri didn't have effective wildlife law enforcement until passage of the Walmsley Act in 1905, the first comprehensive game law that provided for enforcement. When the new Conservation Commission came into being it inherited a force of forty politically-appointed game wardens and some 5,000 special deputy wardens. These latter were political cronies and were hired on a temporary basis at $4 per day, when needed.

The passing out of honorary law enforcement commissions was a popular thing in those days.[1] The old Fish and Game Department also issued "courtesy cards" which identified the bearer as "a friend of conservation and of this Department." You can imagine the reaction of a politically-appointed game warden who, upon apprehending a game law violator, was shown one of the cards.

One of the knotty problems facing the new Conservation Commission was the recall of honorary deputy commissions and courtesy cards, and getting game law enforcement on a professional basis.

Director I. T. Bode and Sydney Stephens

[1] When such honorary commissions were rescinded in Illinois, for example, it was found that a great many had been issued to men in the Cicero area, a suburb of Chicago, and were serving to legalize the carrying of concealed weapons by hoodlums.



There were once 5,000 badge-holding "special deputies"—political cronies who worked temporarily for $4 a day. The new Commission did away with the practice, along with the force of politically appointed game wardens.

wanted to upgrade law enforcement personnel from stereotypical game wardens to agents for conservation. There had been no special qualifications for wardens, other than political endorsement, and they spent their time exclusively on law enforcement or political activities. The laws they enforced were enacted by the general assembly and based largely on what was considered acceptable public opinion, not on facts backed by research.

These were the men, some devoted to protecting wildlife despite their political backgrounds, who came to typify the game warden. He was the butt of jokes in stories and cartoons. A host of epithets followed him—"skunk sheriff," "rabbit warden," "brush cop," to name a few. Bode wanted to change all this.

The Pennsylvania Game Commission at that time had what was considered the best warden force in the country and W. C. Shaffer of that Commission was asked to set up a recruitment procedure for the new Missouri Department. He devised oral and written examinations and from these applicants were to be ranked.

In February, 1938, the Department put out a call for applications and received 751 of them. The interviews were conducted in May at St. Joseph, Cape Girardeau, Warrensburg, Springfield, St. Louis and Macon. Written examinations were given to 480 applicants in Jefferson City in April. On June 27, 1938, a slate of thirty-five men was appointed as "conservation agents."[2] Fourteen of the original forty game wardens were retained, and four of them were appointed as supervisors: Joseph Green, Cave Johnson, W. G. Noble and J. Vernon Bennett.[3] In August,



Conservation agents were rigidly schooled and tested before they passed muster and went to work in the field. A class of agent trainees takes an exam administered by Paul Brooks in 1961.

[2] The name was soon after changed to "wildlife" conservation agents, to distinguish them from Soil Conservation Service field men, also called conservation agents.

[3] The others who made the transition from warden to conservation agent were C. T. Sanders, M. G. McKinley, T. H. Bagnell, M. K. Chapman, Wayland Ford, Frank I. Jones, George Laun and Charles Fleetwood. John P. Heller was retained as fur and fish market inspector and Cleval Corey as a river patrolman.



Candidates for the position of conservation agent were interviewed by four district supervisors. In this 1951 photo, a young candidate is sized up by supervisors Riley Gladden (back to camera), Joe Green, M. K. Chapman and Edgar Allen.

Asbury Roberts, an attorney by training, was hired as Chief of the Protection Section, at that time a part of the Game, Fish and Forestry Division.

The new agents were assigned, for administrative purposes, to one of four districts under a district supervisor,[4] but not before they were required to undergo an intensive two-week training course which included instruction in basic game management techniques, wildlife identification and other subjects related to a modern conservation program.

As former Chief of Protection James L.

[4] Later, the term "region" was applied, when these were further subdivided into districts. As the force grew the number of supervisory regions was increased to nine.



Agents gathered for a conference at Meramec State Park September 28, 1941. Uniformed agents are, left to right: Leonard Rowe, Kenneth Hicks and M. K. Chapman.



J. Vernon Bennett was one of fourteen former game wardens retained as conservation agents. Bennett was hired as a supervisor and went on to serve as chief of Protection from 1947-1970.

Bailey wrote: "Personnel from the Cooperative Wildlife Research Unit [headed by Dr. Rudolf Bennitt] served as instructors and they endeavored to impress upon the new agents the need for coordinated effort on the part of everyone. Much emphasis was placed on the part conservation agents could play in bringing about a better public understanding of future wildlife management programs."

The new agents of 1938 went forth better trained than many agents hired later. In the early years when a new agent was hired, (usually one or two at a time as replacements) he was given his badge, a bundle of forms, a *Wildlife Code* to study and assigned to a county. It was expected that his district (regional) supervisor would take him in hand and give him finer instruction on the complicated job of being both a law enforcement officer and a local oracle on all things related to the outdoors. His supervisor would team him up occasionally with a veteran agent. Most of his knowledge about wildlife and enforcement was learned on the job.

By the late 1940s, Vernon Bennett, James L. Bailey, Dillard Branson or Paul Brooks, who supervised the special agent force, conducted a one or two week training class for new agents if several were hired at the same time.

But in 1951, Bode assigned Supervisor Paul G. Brooks the task of developing a formal course of instruction for conservation agents, and eight rookies were handed over to him for training.[5] The course lasted four and one-half months and covered every phase of Department operations, as well as law enforcement and courtroom procedure. Refined over the years, the course has been accredited by several state universities for twenty hours of college credit. It equips the wildlife conservation agent in a way his predecessors couldn't even imagine. Paul Brooks became the Department's first full-time training officer.[6]

[5] That first conservation agent training class was composed of Chester Barnes, Fred Drummond Jr., Wilbur S. Barnhart, H. G. Gretlein, Glenn Hartsock, Jack Hoey, Edward Kattelmann and Lloyd Phillips.

[6] Others serving as training officers over the years were Earl P. Coleman, John V. Frye and W. Creed Millsaps.



The 1952 agent training class poses on the steps of Stephens Hall. They are, top row, left to right: Paul Brooks, Bud Eyman and Lavon Penrod. Middle row: Leo B. Emmert, Jim Hardy, Charlie Guthrie and Lloyd D. Hursh. Front row: Herb Schwartz, Jim Featherston, Harris White and Sam Cleeton.

Nowadays, recruits live in a dormitory/classroom building on Department headquarters grounds during their twenty-two weeks of training. Weekends they are sent into the field with veteran agents for more on-the-job training.

In January, 1941, in recognition of the important role the conservation agents were to play in the Department, Protection Section was taken out of the Fish, Game and Forestry Division and made a separate division, headed by Asbury Roberts.

In September, 1941, in a show of faith, the Commission adopted a policy statement that gave the conservation agents special status within the Department. The statement's rather turgid prose read as follows:

"The development and expansion of the Commission's program and activities since the date of its creation has necessitated, from time to time, adjustments in the functions of the members of the staff and the respective divisions and sections . . . .

"The Commission views with special approval . . . . the designation of the *conservation agents as the official representatives of the Commission in connection with all of its activities in their respective districts.* This plan, which has been developed by the staff through a series of several conferences, is regarded by the Commission as providing the means of rendering a continually expanding service with the maximum of efficiency . . . .

"The Commission recognizes that the wider and more varied services which will henceforth be required of the conservation agents involve considerations of leadership, ability to cooperate with co-workers, and administrative capacity beyond those which would ordinarily attach to the functions of pure law enforcement. It feels confident that the members of the Protection Division will recognize these considerations and that they will measure up to the responsibilities as well as the opportunities of this broader service. The Commission declares its intention of recognizing, within the limits of its available resources, by advancement and by increased compensation, the development of the leader-



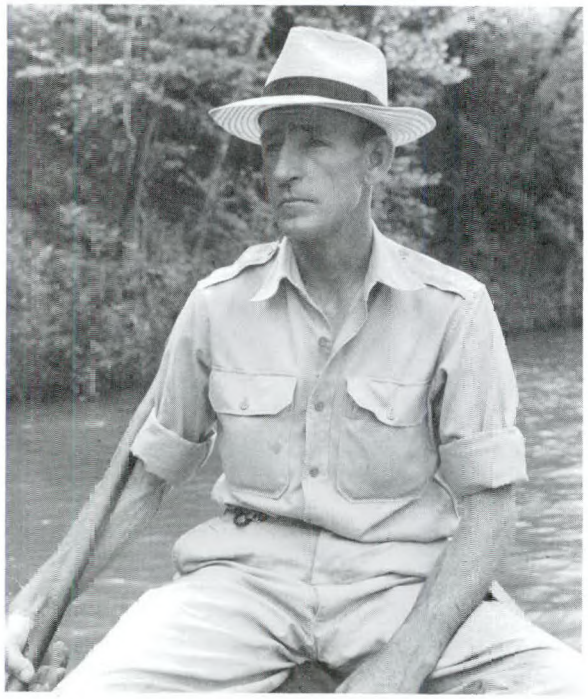
As official representatives of the Department, agents are on the front lines of public contact. Here young and old gather to watch Agent Bill Stark feed a pair of fawns at the 1949 Bethany Fair.

ship and administrative qualities of the members of the Protection Division."[7]

This action reflected Bode's concept of the agent as much more than a game warden and imposed a special trust in the agents as a group within the Department. Probably nowhere else in the country at this time were such officers given so much responsibility and trust.

This broadened assignment was not universally liked by the agents themselves. Some of them, who were oriented only toward law enforcement, were not eager to take on the additional responsibilities.

Paul B. Johnson, a rookie conservation agent at the time, recalls: "I can remember we had a training conference at Cuivre River State Park. We still had some old political hangovers—supervisors and agents both—and it was proposed that the agents do a quail count and a dove count. Some of the old-timers started objecting, saying that they only wanted to be out there enforcing the law. Mr. Bode walked out on the stage and said, 'Gentlemen, I'm trying to make conservation agents out of you. Now, if you want to be only game wardens, I'll pay you to be game



Bland Wilson of Houston typified the devoted conservation agent of the early days. Wilson served Texas County for twenty-one years, from 1944-1965.



Agents proved the young Commission was serious about stopping poaching in this 1943 photo of a road check for licenses and illegal game. Road checks were an effective means of detecting violations—the amount of illegal game seized often filled two station wagons—but increases in traffic volume eventually made them impractical.

[7] At this time the term "Commission" was synonymous with "Department" and did not denote special representation of the four-member Conservation Commission.

wardens. But if you want to improve your lot and improve the program as a Missouri conservation agent, I'll pay you for being conservation agents.' That silenced the objections."

Wardens had received a fee of $3, collected as part of the court costs, from each person convicted of a violation. In addition, the wardens collected a mileage allowance from the violator for miles driven in connection with the case. The fee undoubtedly influenced the warden's judgement in making arrests on minor violations or borderline infractions of the law, and the mileage allowance was another "extra" enjoyed by the wardens. One agent, in a six-month period, collected $162 in fees and $175.70 in mileage charges.

In 1941, Bode determined to do away with these perquisites, believing that such payments were subject to criticism. He suggested that prosecuting attorneys should encourage heavier fines instead. Conservation agents' salaries were increased from $120 to $180 per month to offset some of the lost fees.

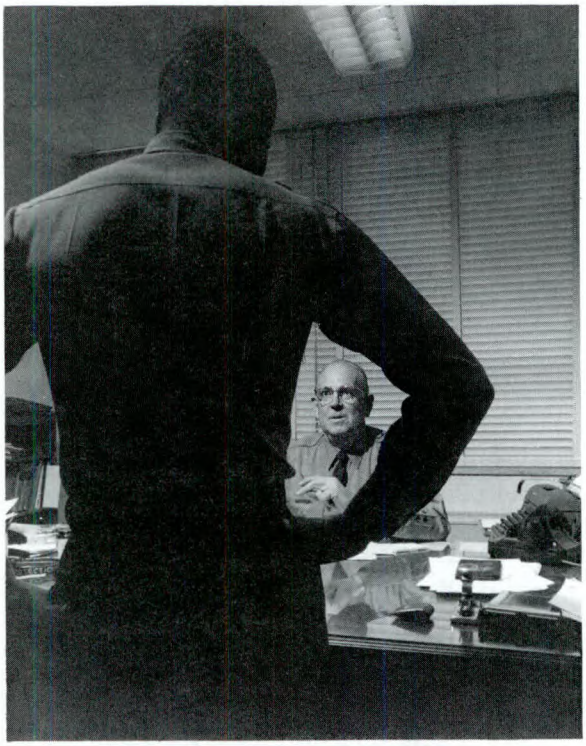
In March, 1947, the Protection Division was renamed the Field Division. The Field Service Section, with Kenneth R. Hicks as chief, was transferred from the Fish and Game Division to join the Protection Section. Jay B. Morrow became the new division chief, with J. Vernon Bennett named chief of Protection. Asbury Roberts was reorganized out of his job. When an assistant director post was created in 1949, and Morrow promoted to it, Bennett became the Field Division chief and James L. "Red" Bailey the new chief of the Protection Section.[8]

Later, the Education Section was added to the Field Division, but in 1977, both Education and Field Service sections were transferred out of the division and it again became the Protection Division, composed entirely of conservation agents.

Today the Protection Division is composed of a chief, two assistant chiefs for field and administration, a law enforcement research specialist, protection special assistant and covert operations supervisor. There are nine protection regions, each with a regional supervisor, assistant regional supervisor and a staff specialist. Regions are composed of from thirteen to nineteen conservation agents. Many conservation agents also carry federal deputy commissions after two years of service, and agents have full police powers on land owned, leased, managed or operated by the Department and also enforce boating and littering laws. They cooperate with all related law enforcement agencies in emergency situations when requested.

Are they effective? For over forty years their conviction rate has ranged between ninety-four and ninety-nine per cent, a record of success greater than any other type of law enforcement.

Besides law enforcement duties, today's agent is responsible for conservation education and information, planning and surveying for wildlife and fisheries, and is on the front



James L. "Red" Bailey was a well-known and popular conservation agent, regional supervisor and superintendent of conservation agents in a career that spanned thirty-four years, 1941-1975.

[8] Other Field or Protection Division chiefs following Bennett's retirement in 1970 were: Paul G. Brooks Sr. (1969-77), Earl P. Coleman (1978-83) and Robert B. King (1983-present).



Conservation agents carry on the fifty-year tradition of license checks, but have undertaken duties as diverse as wildlife surveys, public programs and TV shows.

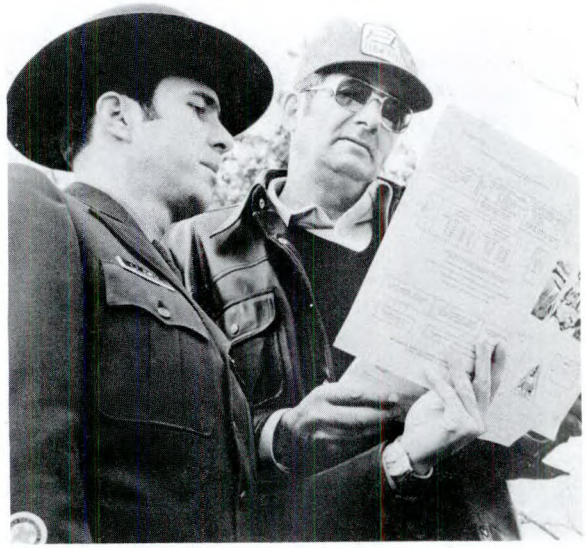
line in investigating forest arson and water pollution cases.

Conservation agents usually work alone, unlike most law enforcement officers who work in pairs. Often their duties require working at night, and they face more armed citizens than any other type of policeman. Nationwide statistics show their chances of assault with a deadly weapon are seven times that of a typical police officer, yet Missouri has an exemplary safety record. Since 1937, only three agents have been wounded by gunfire in the line of duty. Two agents were ambushed by poachers at night in a southeast Missouri field. Another agent was accidentally blinded when a turkey hunter fired as he approached. One of the reasons for this fine safety record is the training agents receive in handling potentially dangerous situations.

This doesn't mean that a good many agents have not been physically assaulted when working alone at night on some river bank. In such situations they often give as good as they get, but today they are trained to avoid escalation into physical assault.

Agents are backed up by two-way radio contact that utilizes the latest equipment, and have a host of other aids to help them in their sometimes difficult jobs. On the forensic front they have a precipitin test to determine if suspected meat is game or not. A lead test can tell them if an archery kill was actually done by a bullet. Ballistic laboratory services are available, and there is a team to perform covert law enforcement duties when needed. Law enforcement research is also being conducted to help make their jobs even more effective. Since 1982, wildlife protection has been assisted by Operation Game Thief, which is a system whereby members of the public

can quickly report observed violations in complete anonymity. This is a reward program of the Conservation Federation of Missouri in cooperation with the Department and has resulted in a number of arrests that might not otherwise have been made.



Conservation agents promote wildlife habitat on private lands by working with landowners on programs like PAWS. Here Agent Larry Yowell discusses a plan for habitat improvement with a farmer.

Situations agents meet today often differ from those of earlier days. On public lands drug users are occasionally encountered, and agents are sometimes confronted with unruly crowds of drinkers. It takes diplomacy and skill to avoid serious problems in such situations. Training makes the difference, but it still takes an unusual person to handle the variety of things the modern conservation agent is expected to do.

* * * * * *

As you approach the gravel road that leads to the Department access, you think of all the eventualities your training has prepared you for—including the unexpected ones. But tonight you're lucky, the group of young people is already packing coolers and has turned off the tape deck. They respond politely to your questions, pick up their trash, and drive slowly up the road—just young people having fun on a warm night.

You breathe a sigh of relief, climb into your pick-up and drive home to enjoy what's left of the evening.

* * * * * *

Today's conservation agent—and there are now 145 of them—brings to the job a good educational background, helping to raise the occupation to professional status. Since 1978, a college degree has been required in law enforcement, wildlife, fisheries or forestry management, education, agriculture, journalism, or closely related biological sciences. Today's agents, in recognition of the strides made to professionalize them, are paid a great deal more than the $120 per month the first agents received. This has helped bring to the Conservation Department competent, well-rounded individuals who have been a potent force in advancing the Department's goals in every aspect of its programs.

Education Section

Both I. T. Bode and Sydney Stephens realized that to develop a sound wildlife and forestry program, education is vital. To them education was two-fold: adult citizens had to be reached at once, so they would understand and support programs being undertaken, and a formal program of reaching Missouri youth was necessary for the long haul.

The Commission believed from the first that Missourians, and especially young people, should know how to be good stewards of their wildlife resources. They believed that restoration of wildlife and forests would come about by people educated to the value of those resources in their lives.

Educating adults means informing them, and that was in Townsend Godsey's and the Information Section's realm. But efforts like the Showboat, used in Forestry, and emphasis on personal appearances before groups by field men augmented the information program.

The first formal youth education program of the Conservation Commission originated with Godsey, also. When he had worked for the Fish and Game Department in 1932 he



In October, 1939, Sturgeon area schoolchildren were awarded prizes for essays entitled, "How I Can Improve Our Farm for Quail." The essay contest preceded efforts like the Nature Knights as an early attempt at conservation education.



Photographed in 1940 at Pine Grove School in Texas County, these young conservationists were among the first groups of Nature Knights in the state.

had devised an education program but was unable to implement it. When he returned to head the Information and Education Division he offered the plan to the Commission and put it into effect in the spring of 1939.

Called "Missouri Nature Knights," it was a system of activities and awards through which boys and girls between the ages of six and sixteen could earn recognition for various conservation practices. The program provided activities based on three principles of learning—motivation, thinking and action. Youngsters were enrolled as Pages and earned points for activities that helped restore wildlife habitat, at the same time learning fundamentals of resource conservation. They progressed through Squire, Knight and Conservationist steps to earn awards in the form of certificates, badges and medallions.

Walt Disney, who grew up in Marceline, designed the certificates for the program, which were instant hits with the youngsters.

The idea won acceptance from leaders of various youth groups, as indicated by the large numbers of schools, 4-H clubs, Future Farmers of America, Scouts and Campfire Girls who participated in Nature Knights. The state Department of Education recognized the Nature Knights Club as meeting club requirements for approval in a first-class school.

In the first biennium, Nature Knights conducted 5,727 farm surveys for wildlife, created 520 bird havens in school yards and 763 on farms, planted 1,047 wildlife food patches, planted 23,839 trees, built and hung 7,266 birdhouses, made and displayed 31,391 wildlife and forestry posters, built 569 school exhibits, and gave 3,920 talks on the subjects of "What is conservation?" and "Why conservation rules?"

The Nature Knights program continued until 1959, when it was finally discontinued.



School consolidations and greater participation by rural youngsters in other activities showed that the program had served its purpose. For twenty years youngsters all over Missouri had enjoyed earning awards while learning about their wildlife and forestry resources. Even today, a number of adult Missouri citizens proudly display their Nature Knight pins and look back fondly on their association with the program.

Some of their efforts on behalf of wildlife and forests remain as evidence of the things

The Nature Knights program was structured to let youngsters progress from pages to squires and knights as they achieved conservation goals. A group of Nature Knights plants seedlings on a lakeshore, below, and L. N. "Pop" Elson points out features of a stream on a Nature Knights outing, left.



young people can accomplish with the right motivation. The influence of exposure to conservation concepts is difficult to measure, but the strides that have been made in conservation over the past fifty years attest to Missouri citizens' awareness and concern about resources—in many cases as a result of participation in the Nature Knights program in their youth.

There was considerable debate among educators in the early years as to how conservation education might best fit into the schools. There was a difference of opinion whether it should be introduced as a separate subject or course, as something to be integrated into other subjects, or as an extracurricular activity. The Commission welcomed the opinions of educators and was struck by a statement of F. Olin Capps, then of the Missouri University Laboratory School:

"Education as a vital factor in the conservation movement has received very little attention in the past. Most emphasis has been placed upon the importance of legislation, but the destruction and waste of natural wealth has continued at an alarming rate in spite of all the laws which have been enacted for its protection.

"Today there is an increasing recognition of the needs of an educational program to support the laws which are necessary, and to develop an attitude, not merely of preservation, but of wise use and habitat restoration. When this attitude has been attained by the majority of our citizens, the Department's programs will begin to function more effectively.

"It is fundamental that all teaching materials be based upon scientifically accurate facts and principles of conservation. This information, as yet, has not been organized and made available so it can be used to the best advantage by those who are responsible for presenting it to the boys and girls of our schools.

"Such an extensive program would require much more than can be accomplished in a special course. It demands that most of the teaching be done through integration with existing subjects. This will necessitate a careful preparation of teaching materials if needless duplication is avoided and pupils receive the benefit of instruction."

Dr. Capps and Everett F. Evans, in cooperation with the state Department of Education and University of Missouri, began work on seven teachers' manuals covering the subjects of soils, water, forests, birds, mammals and fish, plus an introductory manual. They were designed to furnish basic information and principles as well as to suggest effective conservation education activities. The manuals were completed and ready for distribution when the Commission created a separate Education Section in July, 1941, hiring Capps as its head, with Evans as assistant.

The new section's aims and policies were voiced by Capps:

"The hope of wildlife conservation lies in the three-way cooperation of the Department, the landowner and the public, based upon adequate education and mutual understanding. The fundamental aim is that every individual in the state be given an opportunity to learn of Missouri's natural resources and to know what can and should be done by them in making possible the wise use and restoration of those resources."

To accomplish this the Education Section based its program on these points: teacher-training institutions must insure that all teachers have an adequate background in the fundamental facts and principles of conservation; readable, factual material must be prepared for teachers; instructional aids must be developed, and informational materials designed for youngsters at all grade and reading levels must be prepared. The teachers' manuals were a first step, and other educational materials followed.

Conservation education advisors[1] were added to the staff—there are now fourteen of them—and assigned to different regions of the state. Their jobs were to work with school systems and teachers, teacher training institutions and other youth leaders. They conducted teacher workshops and assisted in integrating conservation education into various school curricula. During the summer they worked with youth camps.

[1] Now called "conservation education consultants."

In 1952, James F. Keefe wrote a series of conservation stories for his daughter that the Department took over and published as readers for use in schools. They were graded to various reading levels: *Meet My Neighbors* for grades one and two, *The Little Stream* for grades three and four, *Buteo's Forest*, five and six, and *Citizens of the Soil*, seven and eight. These were provided free to classroom teachers and continue to be used in Department education programs.

Education Section was a separate entity until 1948, when Information and Education were combined into a single division, with Dr. Capps as its head and Dorris Frazier as chief of Education. In 1951, Gordon H. Smith replaced Capps as Division chief, and Capps again headed the Education Section. In 1955, Kenneth R. Hicks became the Division chief, but three years later the Division was again split, with Education assigned to the newly created Field Division. This was an uneasy marriage of Protection, Field Service and



Dorris W. Frazier introduces a young friend to the marvels of a speckled kingsnake. Frazier worked in conservation education programs from 1942-1968.



Teaching conservation principles by teaching teachers has helped spread the conservation message. Here A. R. Mottesheard and a group of schoolteachers take soil samples at a 1951 workshop in Liberty.

Education; Education simply did not fit in such a group, administratively or philosophically. In 1977, the Education Section was taken out of Field Division and has been a separate entity under the supervision of an assistant director since.

Dr. F. Olin Capps resigned in 1961 to accept a position with the U.S. Fish and Wildlife Service, and Clarence E. Billings, who had been an educational advisor since 1947, replaced him as chief of the Education Section.

Under Billings the Education Section continued teacher/leader training, but in 1976, branched out to include mobile conservation workshops and pushed for development of outdoor classrooms at schools. Teachers statewide can participate in "mobile workshops," touring different environments to learn of resource use and conservation. There are two separate mobile classrooms each year now, utilizing buses and vans, one in north Missouri and the other south. College credit is offered participants. Week-long conservation camps for teachers have been conducted for a number of years, in addition to the mobile workshops.

Where schools had small parcels of land available, education advisors help schools develop them as "outdoor classrooms." Youngsters use them to learn about the natural world through observation and activities on the land. Many Missouri schools now use these outdoor laboratories in their teaching efforts.

With passage of the conservation sales tax and transfer of Education from the Field Division, the section was reorganized with separate units on conservation education and outdoor skills.[2] A broadened environmental education program, called K-8, was launched with new teacher manuals and more materials for classroom use by youngsters. Clarence Billings retired at the end of 1982, and Donald K. Heard took over as conservation education superintendent.

Heard had been a conservation education advisor from 1963 to 1967. He resigned to further his education, taking his doctoral





Conservation education consultants show teachers how to integrate conservation into regular curricula. Virgil Davis, above, visits a Texas County classroom in 1955. Neil Jenkins, below, leads a workshop at Tea Lake in Franklin County in 1968.

[2] The conservation education unit was headed by Gary D. Harvey (1978-1980), Donald K. Heard (1980-1983) and Al Palladino since that time. F. E. Eyman has headed the outdoor skills unit since 1977.



A fall conference brought the Education staff to Columbia in 1960. They are, front row, left to right: Wayne Adams, Basil Morlan, James P. Jackson, Clarence Billings, F. Olin Capps. Back row: Dorris Frazier, Jack Reed, Neil Jenkins, Virgil Davis and A. R. Mottesheard. Wilma Ketchum, an education advisor, was not present for the photo.

degree in 1980. Heard felt the K-8 program did not reflect modern educational concepts and organization; he created an entirely new set of programs for the Conservation Education Unit when Al Palladino was promoted to assistant superintendent of that unit. Under Palladino's supervision the conservation education programs were expanded and improved to better fit current Missouri education systems and curricula. The first phase was aimed at educating pre-school youngsters and was called "Conservation Seeds." Materials and activities to interest that age group were developed and distributed to adult leaders and kindergarten teachers.

Recognizing children's attraction to animals, Palladino took a cartoon deer mouse developed by artist James L. Keller, named it Otis, and had materials prepared for elementary school children in grades 1-6 called "Learning with Otis." The material includes a variety of educational approaches and a quarterly "newspaper" that youngsters receive and are urged to share with their parents. A more advanced "Conservation Education Series" was created and provided to teachers for secondary school youngsters.

Presently there are some 5,500 teachers and 82,500 pre-schoolers enrolled in the "Seeds" program from both public and paro-

chial schools. There are 17,000 teachers and one-half million youngsters using the "Otis" program. Some 24,000 teachers and 1.2 million youngsters use the "Conservation Education Series."

Special education programs were developed for handicapped and learning disabled students, so that they too might benefit from the outdoors. Beyond the classroom, "Missouri Conservation Frontiers" was created for youths and adults, modeled somewhat on the old Nature Knights program. About 450 adults and 6,500 children are enrolled in "Frontiers." In cooperation with the state Division of Vocational and Adult Education a "Vocational Agriculture Conservation Curriculum" was developed and implemented.

In addition, working with the Department of Social Services, a conservation camp for underprivileged children was established. The Department's outdoor classroom program was expanded and in conjunction with the University of Missouri, a conservation honors program was set up to provide scholarships and leadership training for high school juniors exhibiting both academic achievement and an interest in conservation as a career.

Another aspect of the Department's education effort was hunter safety training, begun in 1958. It was assigned to the Protection



Otis, the Conservation Mouse, visits workers assembling "Learning with Otis" packets. In 1987, over 17,000 teachers used the material to present conservation principles to grade school students.



Agent Supervisor Dillard M. Branson, left, began the Department's hunter safety program in 1958. In 1964, Branson received a plaque from the National Rifle Association, presented by Gov. John M. Dalton, right, as Director Towell looks on.

Division under Supervisor Dillard M. Branson and was principally conducted by conservation agents, based on programs developed by the National Rifle Association. The four-hour course was offered to adult volunteers, who were certified as instructors upon successful completion of the course. The aim was to create a corps of instructors outside the Department who could instruct others in safe firearms handling, thus reducing hunting related accidents. Conservation agents, education advisors and other Department personnel did a lot of the basic training, in addition to work of volunteer instructors.

The Department developed its own training manual in 1969. In 1973, the Department was recognized internationally for providing the best hunter safety training program in North America. Conservation Agent F.E. "Bud" Eyman was placed in charge of the program that had trained many thousands of Missouri youth and adults in firearms safety; he broadened the program to include more than safety. Wildlife life history, hunter/landowner relationships and the ethical use of the outdoors helped expand hunters' perceptions of their sport.

When the Education Section was taken out of Field Division in 1977, the hunter education effort came with it. A new unit called "Outdoor Skills Education," headed by Eyman, developed programs of training in all aspects of outdoor use. Developing in the schools at this time was the concept of "life sports"—activities that citizens could pursue during their entire lives, such as hunting, fishing, hiking, camping, boating, outdoor photography, bird watching, archery and orienteering. The new Outdoor Skills Unit developed modules for use by physical education, social studies, elementary teachers and other youth leaders to teach these sports. The unit presently uses eleven outdoor skills specialists distributed over the state to train educators and help develop programs. They have developed Department ranges for archery, rifle, pistol, shotgun and black powder shooting and helped others set up ranges. They conduct urban fishing clinics, hunting and fishing seminars, and have created programs for handicapped citizens to participate in outdoor sports. The education effort has come a long way from merely training hunters in firearms safety.



Conservation education consultants bring the outdoors and its skills to youngsters with disabilities. In this 1985 photo, a boy learns to shoot a shotgun with the help of Wayne Martin.



Outdoor skills instructors teach a broad range of life sports and concepts, from outdoor ethics to orienteering.

From the first, the Education Section has worked closely with the state Department of Elementary and Secondary Education, which generally defers to the Department on conservation matters. Gaining credibility and the support of that department made the Conservation Department's program acceptable to the school systems. No other state conservation agency has education programs as encompassing as Missouri's. The Commission has given excellent financial support—an annual average of about two percent of its expenditures—to the formal Education Section efforts, making possible both continuity and longevity of efforts. The Education Section has insisted that its staff come from the ranks of teachers so they are familiar with teacher needs, school organization and curricula. Regional conservation education consultants quickly became known and relied upon by teachers and administrators. The support of education efforts by other arms of the Department have contributed to the program's success.

Education isn't resting on its laurels, however. It is involved in research on how best to meet the needs of teachers and students. It also is researching changing public attitudes toward conservation and resource use, so its educational efforts are kept current.

Today, all state-supported colleges and universities offer courses for teachers in natural resources and related fields. Life skills are part of physical education departments, and several colleges offer a major course in conservation education. The Department extends assistance to all these. Capps' announced aim in 1941, that "every individual be given the opportunity to learn of Missouri's natural resources and to know what can and should be done by them in making possible the wise use and restoration of those resources" has been realized. Tomorrow's adults will be wiser than their parents in protecting and maintaining the natural world of Missouri.

Public Affairs Section

To an organization like the Department of Conservation a good public information program is a vital part of its overall aim, because public knowledge and support is necessary for any other program to succeed. This is even more true of an agency created by initiative, because citizens take a proprietary interest in their creation.

Public information work in Missouri conservation had its genesis in the administration of Keith McCanse of the old Fish and Game Commission in 1925-1929. McCanse hired the first director of public information, Neal Walker, in 1927. McCanse initiated and edited *Missouri Game and Fish News.* This was a "digest" type publication with good photographs and illustrations, but was published only erratically. In 1928, the first motion picture on Missouri wildlife, *The Outdoor Life History of Missouri,* was completed. It was also under McCanse that fishing condition reports were first issued. McCanse became so interested in the relatively new medium of radio that he left the Fish and Game Department to pursue a career in that field.

At the meeting with conservation experts from around the country, called by the Commission on September 25, 1937, one of the six recommendations made to the Commission was that it "should conduct the activity



In 1949, this mobile exhibit made the rounds of county fairs to introduce Missourians to their wild inheritance.

of public relations, with particular reference to education and farmer participation in wildlife conservation."

In late 1937, Director Irwin T. Bode presented to the Commission a proposed table of organization that contained what he called an "Information Service Division."

As proposed, there would be three sections: a "general information section" that would produce publications, exhibits, visual aids, and utilize radio and news releases; a future "field service section" whose duties would be contacting Federation clubs for program assistance (evidence of Bode's "extension" philosophy); and a future "junior education section," to prepare teaching materials in cooperation with the State Department of Education, and to work with 4-H and other youth programs.

He already had a publicity man, Eugene L. Preston, inherited from the old Fish and Game Department, but Preston left shortly after the Commission was formed. In his place Bode hired Townsend Godsey, who had been a publicity man for the Fish and Game Department from 1929 to 1933, losing that job when Wilbur Buford became director.

Godsey was the state's second conservation public information officer, hired in 1929, to assist the administration of Delph Simons and later, that of John Ross. He had a background in newspaper work in the St. Joseph and Kansas City areas before service with the Fish and Game Department. It was Godsey who began the use of radio in 1930, broadcasting about fish and wildlife topics via station WOS (later KWOS) from the Capitol rotunda. Godsey was a fine photographer and he produced three motion pictures on Missouri state parks and one on Lake of the Ozarks, before losing his job to a new administration. Godsey stayed in the Jefferson City area and was hired for occasional work by Buford during his administration.

Under Bode, Godsey was given four and one-half percent of the Department's budget for his information program; his staff consisted of himself and two clerks. He utilized the motion picture medium to produce a film series, *Conservation Newsreel,* which was distributed to motion picture theaters. At Sydney Stephens' urging he produced the first feature motion picture, *Back to Missouri,* which cast the Commission in the role of vital link between landowners and sportsmen. The film was in 35 mm format and was a great hit when shown widely in theaters over the state.

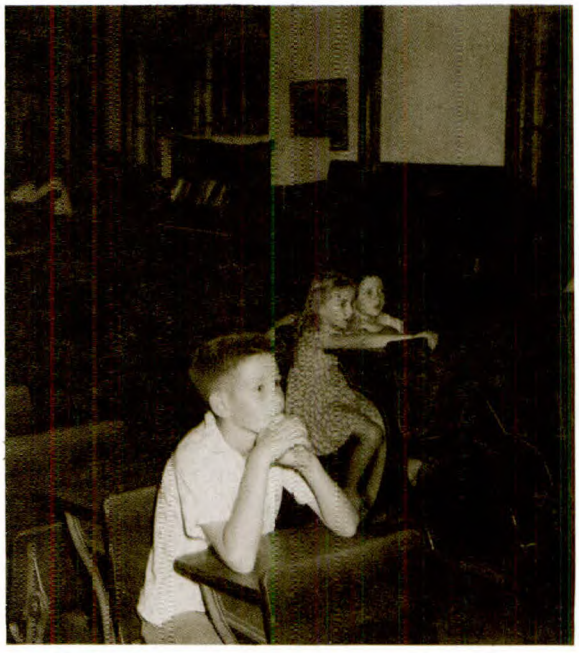
In July, 1938, Godsey began publication of the *Missouri Conservationist.* He set up the Department's film library for loan of motion pictures, and began issuing a weekly news release on Department and conservation topics to all news outlets. Department personnel also began appearing on radio under Godsey's guidance.

The Fish and Game Department had been involved for a number of years in exhibit work at the State Fair, and in 1936, that department had exhibited for the first time at a St. Louis sports show. Godsey was to continue this.

In June, 1938, Bode hired Wallace Gray as a Field Service agent, initially assigning him to the Information Division, but Bode later transferred the field service function to the Fish, Game and Forestry Division. Writing in the Federation's publication, *The Conservationist*[1] in July, 1938, Bode said, "This full-time field man will devote his time to the educational and informational program, especially assisting conservation groups in organizing local programs and to development of farmer-sportsmen cooperative activities." It was the beginning of the field service program of the Department.

A significant public information effort, begun in 1939, was Forestry Division's Showboat, a van equipped with a portable generator that was sent into the Ozarks to show motion pictures about forest fire prevention and related conservation topics. Though not a part of the formal Information program, it is typical of the ecumenical approach to conservation information and education that has been a hallmark of the Department, where every employee is expected to be an apostle for its programs.

[1] Title was later changed to *Missouri Wildlife* to avoid confusion with the Department's *Missouri Conservationist* magazine.

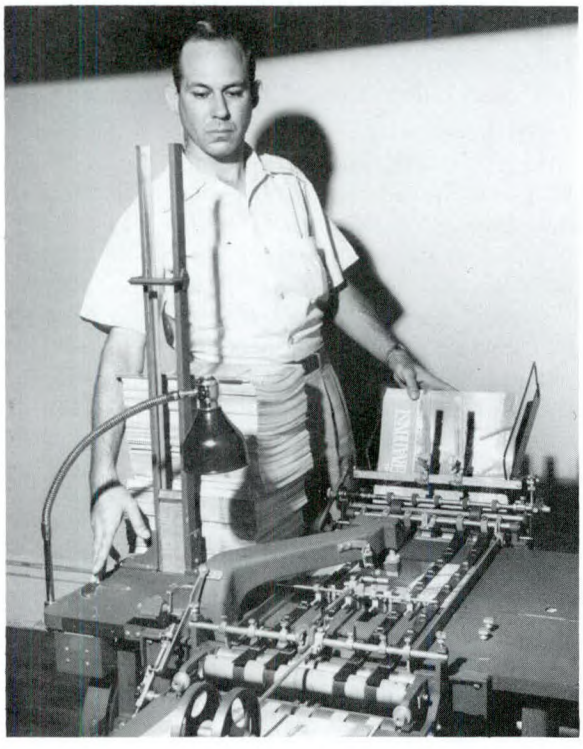


Schoolchildren sat with rapt attention when the "Showboat" showed conservation filmstrips in 1946. For many, these were the first films they had ever seen.

When Godsey resigned in 1941, Information still was a one-man show, but he had established all of the functions of an information section but one—television. He had started a vigorous publications program, turning out leaflets, circulars and bulletins. He had started the *Conservationist* magazine, although at this stage it was only in tabloid format and issued quarterly. He sent out a weekly news release to all media. He had begun a motion picture program with a film lending library. He had involved the Department in radio work, and strengthened the exhibit program. All these activities were useful in keeping the public informed of programs and services available to them, and seeking its continued support. In addition, he had begun the Department's first educational effort, the Nature Knights. (He had conceived the program in 1932, prior to leaving the old Fish and Game Department, but was unable to put it into effect under the political conditions of the time.)

His successor, Harold Clover, started the Department's photo files when he hired a full time photographer, Rex Gary Schmidt. The burgeoning publications program and the magazine created a need for many more photos than were currently available. Clover changed the *Conservationist* format from a quarterly tabloid to a monthly magazine with the April, 1943, issue. He began use of two colors, and the magazine became a more powerful vehicle in wildlife and forestry information as circulation increased.

When it was first issued, the *Conservationist* carried a statement by Syd Stephens on the first page explaining that the new publication was an experiment and that it would be continued if Missourians welcomed it. The experiment was greeted so enthusiastically that there was never any doubt after the first issue that it would be continued. The magazine rapidly became the most "visible" effort of all the Department's programs. The circulation—and the expense—grew so fast that it frightened Godsey, who suggested placing a twenty-five cent fee to help cover the postage cost. This was approved, but became so cum-



Francis Mertens applies address labels to 1953 editions of the Missouri Conservationist.



Information Secretary Barbara Bales kept track of Conservationist *subscriptions and labeled them with an addressograph in 1952.* Conservationist *circulation rose from 10,000 in 1943 to over 450,000 in August, 1987.*

bersome to collect that it was soon dropped. The *Conservationist* remained free to Missouri subscribers and the Commission often opined that spending money on it was probably the best thing they did.

Clover left the Department for military service during World War II, and Charles Callison served temporarily as Information chief and editor. He had able assistance from Charles W. Schwartz (who was developing his artistic skills) and W. O. Nagel. Both were transferred from the Fish and Game Division during the war to help the Information effort.

After the war, Clover returned only briefly, leaving for good in 1948 to start his own motion picture company. Dan Saults was his replacement. After returning from military service, Saults had tried his hand at free-lance writing without notable success and was looking for a job when Clover hired him as a writer in 1947.

Although Harold Clover was the one who changed the magazine into a more professionally presented publication, his main strength lay in photography. It was Dan Saults who brought the *Conservationist* to editorial heights. Saults had been publisher of the Knob Noster *Gem* before entering military service in World War II. As editor of that country weekly he had written vigorous editorials that attracted national attention. He



Charles Callison, right, joined Dorris Frazier in a 1946 quail hunt. Callison served as editor of the Missouri Conservationist *from 1943 to his resignation in 1947. He went on to head the National Audubon Society in Washington, D.C.*

brought that same vigor to the pages of the *Conservationist*, with the full support of Sydney Stephens. While Bode recognized the worth of the magazine in the Department's programs, he never had the feel for public relations that Stephens had. It was Stephens who supported Saults in his editorials, which were winning the hearts and minds of readers for conservation.

Bode was reorganizing education and information about that time. An Education Section was created in 1942, attached to the Administrative Division; Information existed as a separate division. Most conservation agencies in the country had combined these two programs and Bode followed suit by creating an Information and Education Division in 1948, with F. Olin Capps as chief, Harold Clover as head of the Visual Section and Dan Saults as head of the Publications Section. When Clover left, Saults was made chief of an Information Section, combining the Visual and Publications sections. This organization continued until 1958, when Director William Towell abolished the Information and Education Division, assigning Education Section to the new Field Division, and attaching Information Section to the director's staff. Dan Saults was promoted to assistant director, and James F. Keefe was named to head the Information Section.

Under Keefe the magazine's editorial policies begun by Saults were continued. But Saults so loved to write editorials that he continued to do so until he finally left the Department in 1964. He had served as editor of the *Missouri Conservationist* for nine years and continued to write most of the editorials for another seven years.

Keefe, in addition to administering the Department's Information Section, served as magazine editor for twenty-eight years, taking it from a monthly circulation of 20,000 to nearly 400,000 from 1957 to 1985, when he retired as editor.[2] During those years the magazine won many honors. It was recog-



Werner O. Nagel was a creative force in the formation of early Department philosophy and goals. Nagel created the character of Cy Littlebee, whose homespun wisdom and humor educated thousands of Missourians about conservation.

nized three years in a row by the Association for Conservation Information as the best conservation magazine in the country. Its influence over the years has been profound and it continues to be the single most visible program of the Department. Articles deal with programs and philosophies of the Department, blending facts with humor in a mix attractive to readers.

In 1983, a journalism student surveyed the *Conservationist* readership and found that readers had received the magazine an average of nine years, and that over one million Missourians read at least a part of each issue. Twenty-five percent of the survey respondents were women and almost half the households receiving the magazine had children who also at least looked through it. Ages of subscribers ran from six to ninety-nine years. Out-of-state subscribers, who paid for their

[2] Not enough recognition is given the managing editors of the magazine, who handle the day-to-day production work. Past managing editors include Charles H. Callison (1943-44), who also was wartime editor (1944-1947), W. O. Nagel (1944-1945), Glenn Hensley (1947), Raleigh A. Ward (1948), Ralph Pogue (1949-1951), Darrell S. Meyer (1951-1953), Wilfred R. Nunn (1953-1955), James F. Keefe, editor (1957-1985) and managing editor (1955-1961), Malcolm K. Johnson (1962-1985). Johnson has been editor of the *Conservationist* since July 1, 1985.



Information staffers in 1949 were, left to right: Don Wooldridge, photographer; Ken Wood, writer; Dan Saults, Information chief; Ralph Pogue, associate editor; and Bill Gamble, radio and exhibits.

subscriptions, amounted to over eleven thousand. The state with the largest number of subscribers was Illinois, with California second.

Among the nation's conservation magazines, Missouri's *Conservationist* has the largest circulation, reaches the greatest percentage of the population, and is envied and imitated by the others. Although many fine writers, artists and photographers have contributed to its pages, it remains largely staff written and illustrated. Excellent wildlife photographs and artwork are a major feature, and it was through the magazine that Donald E. Wooldridge won national acclaim with his wildlife photography. Charles W. Schwartz' artistic talents were first launched in its pages. But a host of other Department writers, photographers and artists have contributed to its success.

The Department enjoyed generally favorable press relations in its early years, with few exceptions. But any department largely administered by technicians is occasionally misunderstood by the public and the press, and the temperament of technicians is such that they are often unable to utilize the news media to best advantage. Sometimes the result can be small pockets of bad press because of minor misunderstandings.

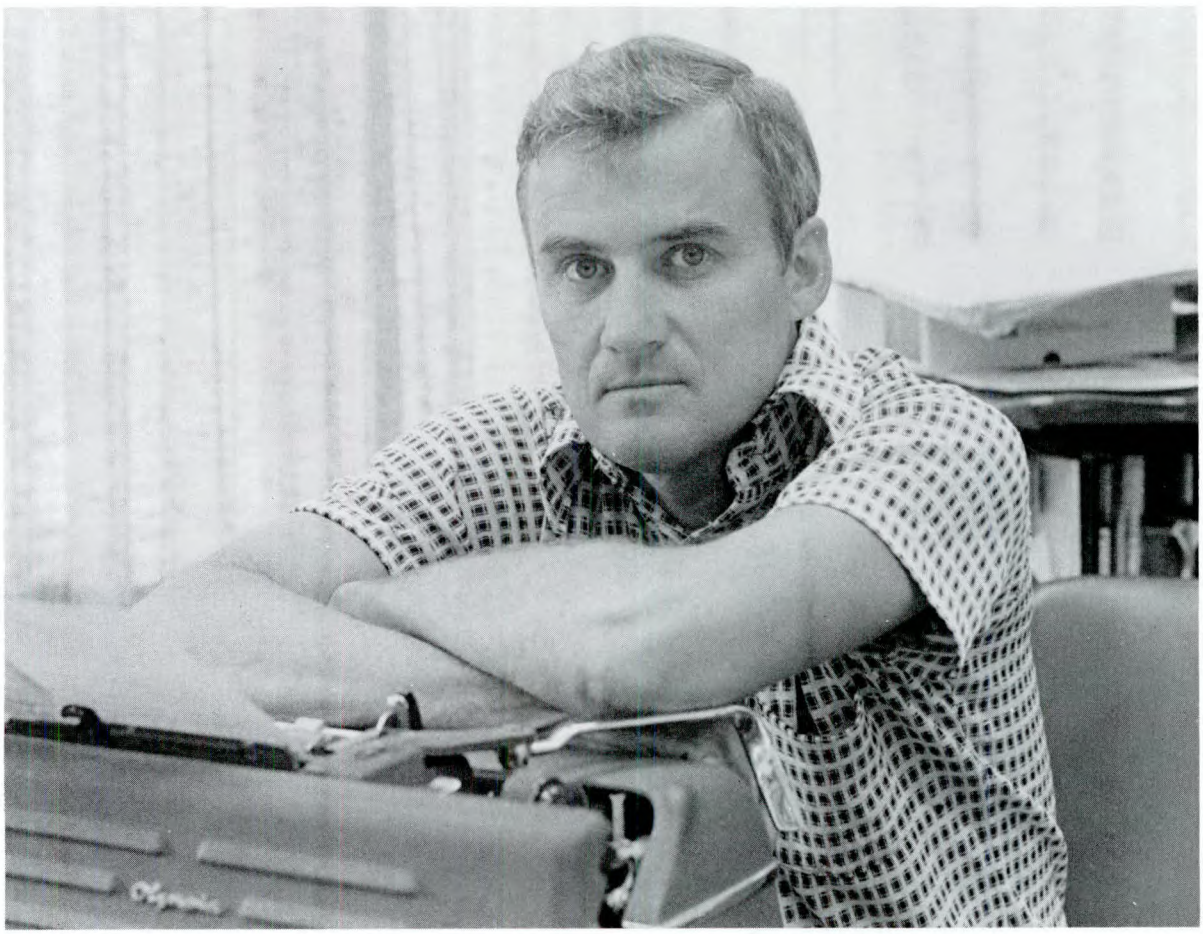
It wasn't until the 1950s that professional press people were hired by the Department to handle press relations. They have been candid and open with the media, openly courting the press's understanding and co-

operation. This has resulted in a good climate of press relations. Field personnel are given basic training in working with newspapers, radio and television stations, and urged to make themselves available to the media.

Under Bode, who was distrustful of the news media at first, such contacts were discouraged and any news release a local agent wanted to make had to first be sent to the Central Office for clearance. When it was pointed out that these men had authority to make decisions in the field on other matters concerning the Department, some of them even with the power of arrest, the policy was relaxed. By training field men in basic news elements, they could be relied upon to speak locally in behalf of the Department with few problems. From then on, field people were urged to work closely with the local media.

In order to recognize field employees who do an exceptional job in working with the media, the Commission authorized an employee communication contest, conceived by Joel M. Vance, in 1984. Field people can win prints of waterfowl or trout stamps for excellence in radio broadcasts or television programs, or newspaper columns. It has become an incentive for field personnel to develop local media programs.

The news release or press handout is the mainstay of most information programs, and Missouri's is no different. For many years the



Readers of the Conservationist *and articles circulated to news outlets statewide enjoy the clarity and humor of Writer/Publicist Joel Vance. Since joining the Department in 1969, Vance's writing about the outdoors has informed and entertained Missourians and won national acclaim for the Department.*



Author Keefe joined the Department in 1951; he served as Information chief and Conservationist *editor before taking a year to research and write* The First Fifty Years *in 1986.*

Department has issued a regular weekly news release package—initiated by James F. Keefe—that is widely used by both the press and broadcast news services.[3] There are several reasons for its acceptance. It is professionally written and presented, and editors like a release that needs a minimum of editing. Editors can depend on its availability, week-in and week-out. It contains hard news and features, not publicity puffs. Each week two screened photos relating to the subject matter are included, adding to the utility of the release. It also deals with a subject that is of interest to a great many readers. Surveys of newspapers have shown that more than twenty-five percent of subscribers regularly read outdoor news or columns. Besides being accepted by the news media of Missouri, the Department's news program is consistently ranked first or second in international competition of the Association for Conservation Information.

In a report that covered the period 1937-1939, there were eight printed bulletins and circulars, plus a few mimeographed items listed as available from the Department. As programs in education, wildlife, fisheries and forestry grew and expanded, and as research brought new facts to light, the number of publications expanded rapidly. By 1967, there were over three hundred different printed items. The number of publications and other printed matter has grown steadily in the years since. Of course, the *Conservationist* magazine and the *Wildlife Code* are the Department's biggest publishing endeavors. Over a million copies of the *Code* are printed each year.



The Department proclaims its message with a wealth of words—carefully edited, designed, illustrated and printed by Public Affairs staffers.

Securing printing outside the Department was, and still is, a tedious process. Once an item was written and checked, a request for sealed bids was made through the Office of Administration's purchasing department. When a bid was received and approved, copy

[3] Since 1961, Joel M. Vance has taken the weekly release to new journalistic heights with features and photographs that consistently win both state and national awards.

was sent to the printer, who set the type and secured illustration. The item was sent back for proofing and returned to the printer for corrections. Then a dummy copy was made, from which it was printed. This took months. It required planning well ahead for needed publications, and ordering enough copies so as not to run out before having to go through the process again. Often, the large orders resulted in printed matter becoming obsolete before it could all be used.

When the Department's printing and mailing services were assigned to Information Section for administration in 1958, publications took a quantum leap forward. Information was able to increase the personnel and equipment to handle the increased demand for printed matter.[4] With modern phototypesetting, offset printing and binding equipment, the Department has been able to do all these operations in-house. Today all type is set on modern phototypesetting machines. Editors, with the assistance of a photography and art staff, design, illustrate and lay out the publication. A well-trained printing and binding staff takes the item to completion. It is sent to the public through the mailing unit, which also handles thousands of other mailings for the Department.

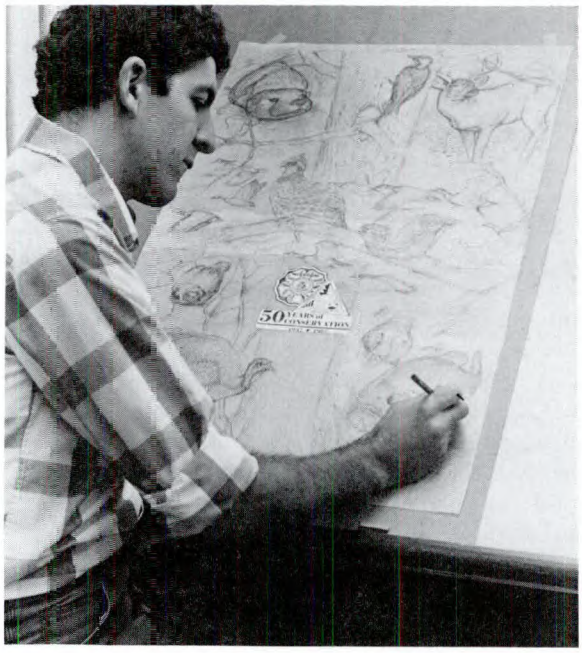
Except for major printing jobs, such as the *Wildlife Code*, book-length manuscripts, the *Conservationist* magazine, and extremely long-run items, most publications can be produced within the Department. This has meant a savings in time and convenience, and less loss through obsolescence of printed matter in storage. Today only enough copies are printed to fill short-term needs, and a new publication can get into print when needed, rather than months later.

The first hardcover book published by the Commission appeared in 1944, and grew out of research work by Charles W. Schwartz on prairie chickens. Entitled *The Prairie Chicken*



The print shop prints or reprints over 3,000 brochures, booklets, leaflets or signs a year.

[4] The Department's printing program's success is largely attributable to the expertise and administrative ability of Wilburn E. Hoskins, printing and mailing supervisor since 1980, who initiated a vigorous printing program beginning in 1962.



Staff artists render the conservation message for all sections and divisions of the Department. Above, Dave Besenger creates the preliminary sketch for the fiftieth anniversary poster.

in Missouri, it was a beautiful book, illustrated with Schwartz' fine photographs of Missouri prairie and prairie chickens. But the volume had limited distribution and was never very popular, although today it has become a collector's item.

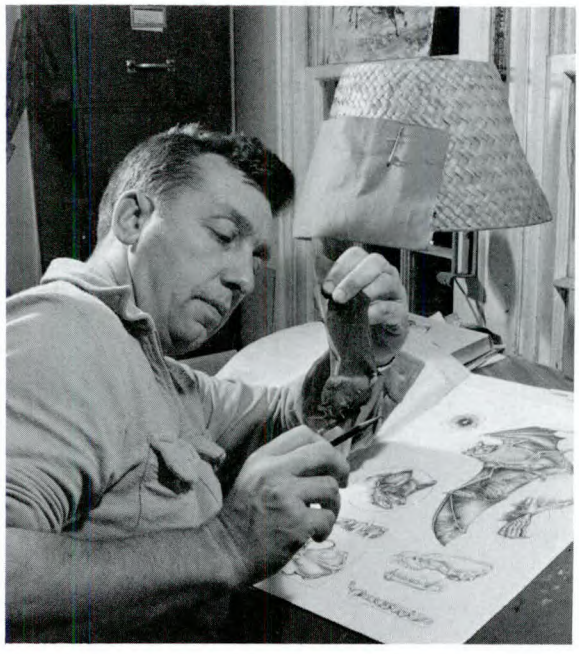
The Rivers of Missouri, issued in 1949 for twenty-five cents a copy, was a paperback with articles on twelve of the more noted rivers in the state. Most of the articles were reprints from the *Conservationist* magazine, and the intent was to focus attention on plans for damming or otherwise altering the streams of the state and the significance of such actions. It was an extremely popular book.

In an effort to document its origins, the Commission hired Charles Callison to write a history of the Conservation Federation and its campaign to create the nation's first nonpolitical game, fish and forest management agency. *Man and Wildlife in Missouri* was published by the Stackpole Company in 1953, with financial assistance from the Love Foundation. The Department has since reprinted the book on its own.

The Department's next book publishing venture was a paperback book authored by Werner O. Nagel entitled *Cy Littlebee's Guide to Cooking Fish and Game.* The Department felt that utilization of the products of field and stream was important as a conservation measure, hence the decision to publish a fish and game cook book. Nagel, who was a fine amateur chef, compiled the book from his own recipes and those sent in by readers of the *Conservationist.* First appearing in 1959, it has gone through ten printings—some 70,000 copies—and still remains a popular item.

The same month the cook book appeared, *The Wild Mammals of Missouri*, by Charles W. and Elizabeth R. Schwartz, was issued jointly by the Department and the University of Missouri Press. The Commission approved contracting with the Press in 1957 to jointly publish the book, which the Schwartzes had been working on for a number of years. It has gone through several editions and revisions since, and is one of the Press' most popular sellers.

In 1965, the Department brought out the paperback *Missouri Ozark Waterways* by Dr.



Artist Charles Schwartz gets a firm grasp of the details of bat anatomy in this 1959 photo.



The collaboration of Elizabeth Schwartz, above, with her husband Charles produced the classic book on Missouri wildlife, The Wild Mammals of Missouri, *first published in 1959.*

Oz Hawksley. It was a book of maps of twenty-two major float streams in the state, with descriptive narrative, floating tips and even travel hints alongside. Hawksley had offered the manuscript to the State Division of Commerce and Industrial Development, but it was not interested in the manuscript, nor did it have authority to charge for copies. That agency brought Hawksley's work to the Department and offered to provide cartographic assistance if the Department would publish the book. Like the cookbook, *Waterways* has been through many editions and is also a best seller with over 172,000 copies distributed.

Werner O. Nagel took on the assignment of updating the Bennitt and Nagel study, *A Survey of the Resident Game and Furbearers of Missouri*, first published in 1937. Director William E. Towell thought that a new book, dealing with the strides made since the Conservation Commission came into existence, would be of considerable interest to conservationists. Nagel wrote *Conservation Contrasts*, sub-titled "Three decades of non-political management of wildlife and forests in Missouri," which was published in 1970. In it he not only updated the earlier work with respect to game animals and furbearers, but included chapters on the other activities of the Department during the years 1937 to 1970.

Retired Union Electric Company executive Edgar Denison appeared in the Department's office one day in 1971, with a cigar box full of flower pictures and an offer to write a Missouri wildflower guide. There was considerable interest in such a book on the part of the public and the Commission approved its publication. *Missouri Wildflowers*, by Edgar Denison appeared in 1972, and has gone through several revisions and printings since. Nearly 70,000 copies have been sold.

In 1974, the Department issued *Missouri Hiking Trails*, by Ramon Gass. A forester and enthusiastic hiker himself, Gass devoted the book to hiking possibilities on Department lands. Some 40,000 copies have been printed. The following year, 1975, the Department published Dr. William Pflieger's *The Fishes of Missouri*, an authoritative work on all species of fish known to exist in the state.

Following adoption of the conservation sales tax and the *Design for Conservation* in 1976, the book publishing program was



Books provide detailed information about the state's wild resources, from bats and butterflies to trees and waterways.

put on a systematic basis. Its intent is primarily to publish high quality books about the wildlife, flora and environment of the state, but also to consider publishing significant scientific literature which, because of limited commercial potential, might not otherwise be published. Books are priced as closely as possible to recover publication costs.

Three books were published in 1980: *Wild Edibles of Missouri*, by Jan Phillips, *Wildlife Drawings*, by Charles W. Schwartz, edited by Michael S. McIntosh, and *A Key to Missouri Trees in Winter*, by Jerry Cliburn and Virginia Klomps. In 1981, *Missouri Orchids*, by Bill Summers was issued.

A Field Guide to Missouri Ferns, by James S. Key, and *Missouri Conservation Melodies*, by Dixie Calvert Fine appeared in 1982. A guide to the freshwater mussels of Missouri, *Missouri Naiades*, by Ronald D. Oesch, was published in 1984. In 1986, the Department brought out a pictorial guide to Missouri mosses, liverworts and lichens entitled *Walk Softly Upon the Earth*, by Lisa Potter Thomas and Dr. James R. Jackson.

Following Godsey's production of the motion picture *Back to Missouri*, filmed by a hired motion picture company, the Department began its own production of films. The team of Charles and Elizabeth Schwartz, trained biologists, undertook the job. Charles had developed his artistic and photographic



Biologists Charles and Elizabeth Schwartz combined their skills to produce Department films. Their movie Bobwhite Through the Year *won the CONI Grand Medal at the International Sports Film Festival in Rome in 1952.*



Filming the phenomena of nature takes an eye for form and movement—and plenty of patience. Here Motion Picture Specialist Lorna Domke is on location for her 1987 wildflower film, Blooming Secrets.

skills, and Elizabeth was an excellent researcher and sound technician, capturing natural sounds of the wild for the films. Several short pictures were made, but they hit the bigtime in 1952 with the feature motion picture, *Bobwhite Through the Year.* That film won an international award, the CONI Grand Medal, at the International Sports Film Festival in Rome, where it had been entered by the U. S. State Department. Their life history film, *Cottontail* also won honors there.

In the years following, the Schwartzes produced movies on mourning doves, mallards, wild turkeys, Canada geese, songbirds, life in an Ozarks headwaters stream, the enjoyment of free-flowing streams, wildflowers, prairies, predation, wildlife habitat and box turtles.[5]

Cinematographer Thomas J. Troughton has produced films on fishing small lakes, squirrel and deer hunting, the Department's natural areas, and trout and catfish rearing. Gary Griffen produced films on the work of professional conservationists in protecting and preserving the environment, and problems of wildlife on Missouri farms. Lorna Domke produced a film on Missouri's wildflowers. In all, over thirty motion pictures have been produced by Department employees, helping immeasurably to inform and educate Missourians about their resources. Most of those films have won honors for the Department in various competitions, and are eagerly sought by other conservation departments across the nation.[6] All films now are converted to videotape as well, for use by schools, organizations and individuals.

Besides motion pictures, the section has developed slide and filmstrip shows on dif-



Thousands of rolls of film are processed in the Public Affairs photo lab. All sections and divisions make use of photography staffers' expertise and get able assistance from Dawn Drainer, above.

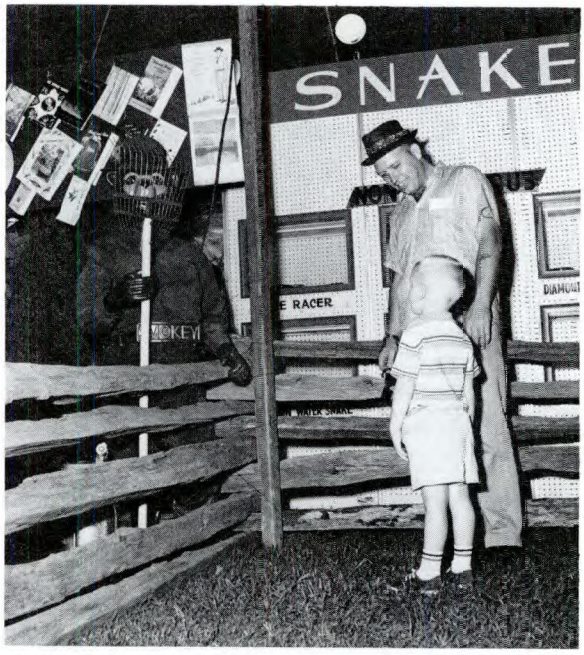
[5] Biologist Glen Chambers worked with the Schwartzes in motion picture production for several years, before resigning to become a Ducks Unlimited representative.

[6] Script writers for Department motion pictures include W. O. Nagel, J. F. Keefe, J. M. Vance and J. H. Auckley.

ferent aspects of conservation, to be used in training employees and educating the public. They are on loan through the section's film loan library. Working with the Education Section, copies are provided free of charge to schools.

The use of exhibits to explain Department programs and inform citizens about their resources has vastly increased since the early days, when exhibits were limited to the State Fair and an occasional sports show. During the war years, travel restrictions curtailed exhibit efforts, but after World War II the Department outfitted a trailer exhibit that toured small county and regional fairs with good results. But with the advent of television, local fairs went into a decline for a few years and exhibits went into the doldrums, too.

Exhibits at the State Fair pavilion of the Department[7] continued, but the trailer was retired. Then fairs began a comeback. The Department entered into agreements with several regional fairs, where permanent display buildings were constructed to house Department exhibits. Springfield, Bethany, Cape



Public Affairs exhibits still make the rounds of regional fairs like this one in Cape Fair where a youngster admires a 1963 version of Smokey the Bear.



The State Fair Pavilion at Sedalia draws tens of thousands of visitors a year to see exhibits of fish, forestry and wildlife. The pavilion was extensively renovated in 1986 to create a 100-seat auditorium for viewing programs, slide presentations and films.

[7] This structure of Missouri granite was built by WPA labor in 1934; it replaced an earlier wood pavilion.



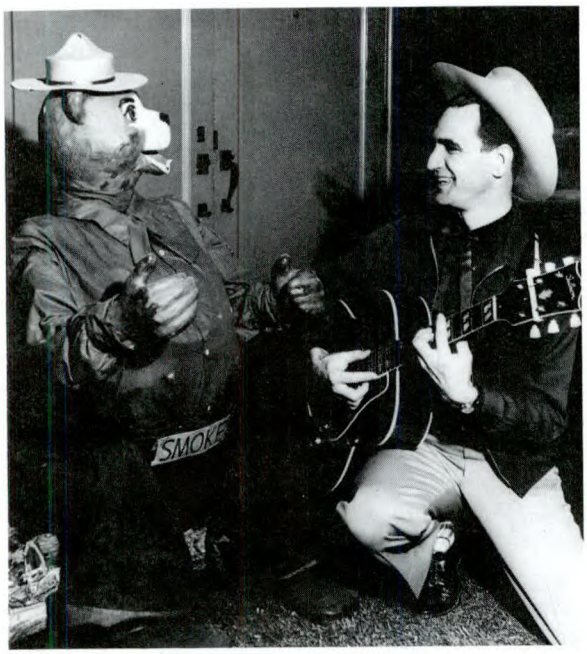
Skilled carpenters create attractive exhibits for use statewide in school programs, hunting and fishing day events, and fairs. Charles Robinson is shown above with a white-tailed deer exhibit.

Girardeau and West Plains regional fairs now host Department displays. Exhibits, formerly handled as a side line by one of the Information staff, soon grew too big. In 1970, the Department hired a full-time staffer to construct its own exhibits rather than buying them commercially.

Today, the exhibit program includes a three-man staff and shop that turns out exhibits for use at the State Fair pavilion (completely renovated in 1985), regional fairs and nearly a hundred smaller fairs and shows each year. Exhibits are prepared for special meetings as well, such as agricultural field days, educational meetings, and special events like Prairie Days, Wildlife Week and National Hunting and Fishing Day.

Radio began to be more fully utilized as an informational tool in the 1950s, when field men (especially conservation agents), field service agents, educational advisors and foresters were freed to use the medium. They were given basic instruction in broadcast techniques and provided with scripts to help them get started. They became so proficient at it that they soon developed their own material—as many as fifty might be conducting programs over local radio stations at any time.

About the same time, the Department again began distributing radio shows of thirteen-week, fifteen-minute programs devoted to forest fire prevention. These were developed by Herschel P. "Woody" Bledsoe, who began his career with the Department as a lookout towerman and went on to run the Showboat for the Forestry Division. He was eventually transferred to Information Section where he demonstrated a showman's flair, playing the guitar and singing songs that country folks could identify with. Mixing songs with gentle folksy chats on the destructiveness of woods fires Bledsoe, as "Woody, the Singing Forester," won a large following over the state —and not just in the Ozarks. In 1962, he changed the programs from forest fire prevention, which had largely been accomplished, to wildlife habitat improvement for upland game.



Hershel P. "Woody" Bledsoe was hired as a lookout towerman in 1942. He found fighting fires with a guitar as "Woody, the Singing Forester" reached a lot more people.

Television came along in the 1950s and, in the days before strong network program-

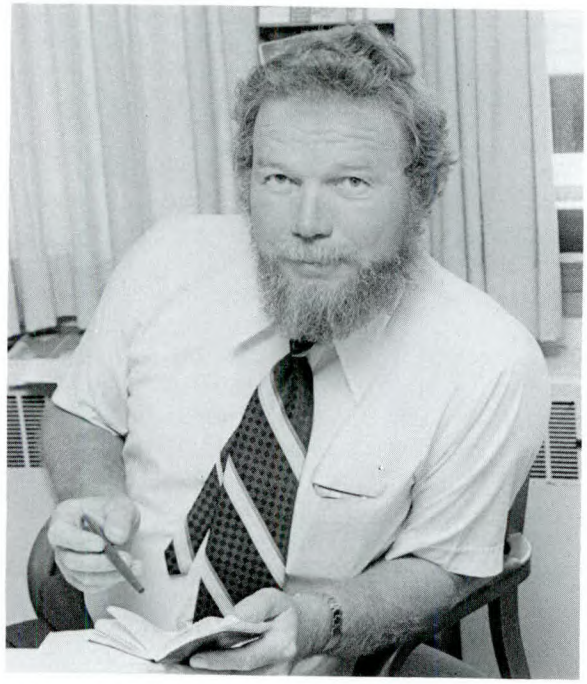
ming, stations were glad to have outdoor shows conducted by Department personnel. Paul G. Barnickol, then superintendent of fisheries research in Columbia, and Bill T. Crawford, his counterpart in wildlife research, jointly hosted an outdoor show for several years over KOMU-TV. Conservation Agent Clarence "Salty" Daniel also conducted an outdoor show over KODE-TV in Joplin. Herschel Bledsoe had a long-running weekly program over KRCG-TV in Jefferson City. These were popular with viewers but eventually were dropped, either by the stations or the participants, because of other job pressures.

Department personnel appear as guests on various television programs, some of them regularly. Cable company stations especially like having Department personnel and programs in their local origin broadcasts. Television public service "spots" have been prepared and issued from time to time, which receive good use by stations.

In 1984-1985, an expanded Department television program was launched by Deborah Rogers. Growing out of a monthly television show over KOMU-TV in Columbia, it utilizes the services of a professional crew to videotape outdoor features for use on the program. The videotapes are then distributed to stations and local Department personnel for use. By mid-1986, they were being seen regularly on a number of commercial TV stations. In some cases features are transmitted to stations by satellite up-link. The "magazine-type" format, using short features on various conservation activities, lends itself well to such programming.

In 1982, the Commission requested a study be made of all Department public information efforts and Dan Forrestal, author of a definitive public relations handbook and longtime public relations head of Monsanto Inc., undertook the job. After studying all aspects of the program, he concluded that only minor adjustments were needed. He suggested dropping a logo used on *Design for Conservation* activities as needlessly confusing. He also suggested upgrading the appearance of the *Conservationist* magazine by going to a better grade of paper. He recommended a motion picture be made on the work of professional conservationists—its relation to the public and impact on the environment. His most ambitious recommendation was for the Department to employ media specialists in Kansas City and St. Louis. Nearly all of his recommendations were adopted, though a media specialist position has not been implemented in Kansas City because a job change there freed up the metropolitan services coordinator to handle media relations.

Beginning in 1986, Jonathan D. Powers has had overall responsibility for the section which is organized in three units: publications, visual and news services. The publications unit is headed by Malcolm K. Johnson, supervising the magazine, other publications, art, typesetting, and printing and mailing. The visual unit is headed by Mark H. Sullivan, supervising photography, motion pictures, multimedia production, film loan library, radio and television and exhibits. Joel M. Vance handles the writing/news services program.



Malcolm K. Johnson joined the Information staff in 1961 as managing editor of the Conservationist *and supervisor of Department publications. He became the magazine's editor in 1985.*

The Information Section was re-named the "Public Affairs Section" in 1986, but its mission remains the same: to inform the public of Department programs and services,

and to solicit citizens' support through all available media.

The success of information efforts is shown in the Department's successes in forestry, wildlife, fisheries and other endeavors. But those successes are not the Public Affairs Section's alone.

Over the years there has evolved in the Department a policy that every employee is obligated to explain programs and enlist public support of them. This is implicit in the change of title from "game warden" to "conservation agent." It is implicit in creation of the field service agent positions. It is implicit in the establishment of the metro-services offices in St. Louis, Kansas City, Springfield and elsewhere. Biologists, foresters and administrators are expected to take part in public meetings, to make personal appearances on radio, television, at press conferences—whenever the opportunity arises. Every new employee gets training in basic informational techniques, and many get occasional refresher courses. Each is expected to be acquainted with the operations of the Department and have some familiarity with what other arms of the Department are doing. In this way, the formal information effort is magnified many times, to the success of all the Department's efforts.

Natural History Section

The Natural History Section came into being following passage of the conservation sales tax. Creation of such a unit was implicit in the *Design for Conservation*, which had promised increased attention to natural areas, special lands, endangered species, non-game wildlife and plants not fully dealt with under previous programs of the Department. While some efforts had been made for non-game wildlife from the earliest days of the Department, there was a real question as to the propriety of using funds which came essentially from hunter and fisherman licenses for such purposes.

The Conservation Commission's constitutional mandate gave it authority over "all wildlife resources of the state," and legislative enactments supported that premise. Game and non-game were not differentiated. However, the realities of the situation, where funding came from sportsmen, naturally demanded that most attention be paid to those creatures considered game.

Possibly the biggest step of the Department toward a wider interest in the natural world was creation of a Natural Areas System in 1970. This was spearheaded by Assistant Director Allen Brohn, Assistant State Forester John E. Wylie and Wildlife Research Supervisor Bill T. Crawford. They prepared a natural areas policy that was adopted by the Commission. A committee was appointed to develop a classification of natural areas in the state, and it searched all Department holdings for examples of such areas. The Conservation Commission designated them as "natural areas," and priority was given to their preservation. Other landholding agencies such as The Nature Conservancy, Missouri Prairie Foundation, the University of Missouri and the U. S. Forest Service entered the program and permitted designation of portions of their lands as natural areas. In April, 1977, the Department of Natural Resources joined the program and a state Natural Areas System, administered by a joint committee chaired by Allen Brohn, was established.



John E. Wylie, seated, became the first chief of the Natural History Section at its genesis in 1977. Wylie and Allen Brohn, standing, were honored by The Nature Conservancy in 1987 for their work establishing a statewide Natural Areas System.

The *Design for Conservation*, echoing the Leopold-Fox-Callison *MCP Report*, promised Missourians the Department would work toward a "rich and diverse environment," which included programs for plants and animals hitherto more or less ignored.

With passage of the conservation sales tax in 1976, the funding base was broadened to include all Missouri citizens, especially those who might be called "non-consumptive" users of wildlife such as bird watchers, nature photographers, backpackers and hikers, and it made possible broadened programs to attain that goal. Over the years interest in wildlife—some ninety-eight percent of which was in the non-game category—had developed, and citizens eagerly endorsed programs to



Bill T. Crawford, above, was instrumental in development of the Natural Areas System that became a model for protection of fragile resources.

preserve both wildlife and plants that were a part of that Missouri diversity.

When the Natural History Section was created in 1977, John E. Wylie, formerly an assistant state forester, became its chief. He developed a staff and programs reflecting the *Design's* promises. Seventeen specialists make up the staff, including naturalists, botanists, an ornithologist, herpetologist and urban biologists. Probably no similar fish and wildlife agency in the country is so competently staffed or has programs so broad.

Attention to non-game wildlife is by no means restricted to this section. Other Department units carry on research on non-game species, manage and protect natural areas and endangered species, employ naturalists and operate nature centers. Natural His-

Non-game species from bullsnakes to pondberry receive attention from the Natural History Section. Herpetologist Tom Johnson, below, and other naturalists help citizens understand their wild resources.





Prairies are among "nature's crown jewels." The varied plant and animal forms found on Missouri native prairies need protection as their once vast habitat continues to diminish. John Wylie addresses a crowd at the dedication of the Hite Prairie in Morgan County in 1980.

tory serves significantly to help coordinate and provide specialized support for programs and management of lands by all Department units so that a full range of natural values is provided.

The Natural History Section's mission was a tall order. There are over 2,700 native plants, hundreds of species of birds, reptiles, fishes and small mammals, and thousands of species of invertebrate animals like crayfish, mussels and insects. The problem was compounded with little known rare and endangered species. For instance, it had been forty years since the wood frog was last reported in Missouri.

To get a handle on all these creatures and their habitats would take a lot of help. Coordination was required with all Department personnel and efforts were made to enlist the aid of all knowledgeable people in the state. The section helped organize a Native Plant Society and a herpetological section of the Missouri Academy of Science. Personnel were assigned to work closely with The Nature Conservancy, Audubon Society chapters, Missouri Prairie Foundation and garden clubs to secure their help. Private and state institutions also were enlisted in the effort. Through a system of small grants and stipends, graduate students and their professors have done a number of studies.

The Department's natural areas program became a part of the new section when a natural areas coordinator was appointed. Natural areas can be thought of as pristine ecosystems or as special habitats. In either

case, they are home for most of our species of plants and animals—some of them extremely rare. Endangered Species Coordinator Dr. James H. Wilson drew the analogy: "Brickyard Hill Loess Mounds Natural Area in Atchison County is over 400 miles from Cash Swamp Natural Area in Dunklin County, but *biologically* they span a distance from the high plains to the Mississippi Delta, more than a thousand miles."

There presently are 136 natural areas registered in the state, with eighty-eight owned or managed by the Department. The system has been refined to embrace terrestrial, aquatic and geologic systems. Much of the effort has been to inventory and survey the state for potential natural areas and endangered species habitats. So much new information on natural areas and rare and endangered species was amassed that the section had to develop a data system to effectively use it. With the help of The Nature Conservancy, the section has developed a natural heritage data base with 4,500 elements of the state's natural diversity recorded. This information is used by planners throughout the Department, as well as other agencies and the general public, in consideration of fragile environments or endangered species when planning any developments.

Land acquisition has been an important and enduring function of the Natural History Section. Wylie is fond of describing their values as "nature's crown jewels." Prairies, caves, swamps, marshes, glades, old forests and springs have all come into public ownership for public enjoyment. Many are designated as natural areas, others as special habitats for rare and endangered species, some have special features for people who like to see and enjoy wildlife and the wildlife community itself. One special category of land is called "urban wild acres," lands bought as nuclear habitats in cities for the enrichment of urban neighborhoods.

Surveys make up a large part of the section's programs to determine the status and distribution of wildlife and plants, many of them little known. Elementary research in combination with survey results are used to develop management plans. Missouri was the first state to undertake statewide surveys of



Missouri has acquired immature bald eagles to be released in the wild in hopes of re-establishing a nesting population. This young eagle is being "hacked"—cared for in captivity without direct human contact.

all candidate plants on the federal government list of possibly endangered species, and the first to set up a monitoring program for such plants. Efforts have extended from hummingbirds to bald eagles and trumpeter swans, from shrews and bats to jackrabbits and otters, from tiny wood frogs to giant alligator snapping turtles. Other species studied include tiny cave fish, lake sturgeon, bluebirds, barn owls, collared lizards, Franklin's ground squirrels, Blanding's turtles, crayfish, mussels, and plants from the one-inch high *Geocarpon* to Nuttalls' oak—all part of the rich tapestry that is the Missouri natural world.

The section has surveyed the biological organisms in over 500 Missouri caves, finding twenty-five species of invertebrates that are new to science. It has played a major role in bringing back bald eagles to nesting status in Missouri, and in efforts to preserve the red wolf, now nearly extinct.

The bulk of Missouri's citizens live in the two metroplexes, Kansas City and St. Louis. There is wildlife there, too, and interest in



Interest in the natural world continues to grow, as citizens explore the flora and fauna beyond their doorsteps. Here Botanist Sherry Morgan records the location of an Ozark wake robin.

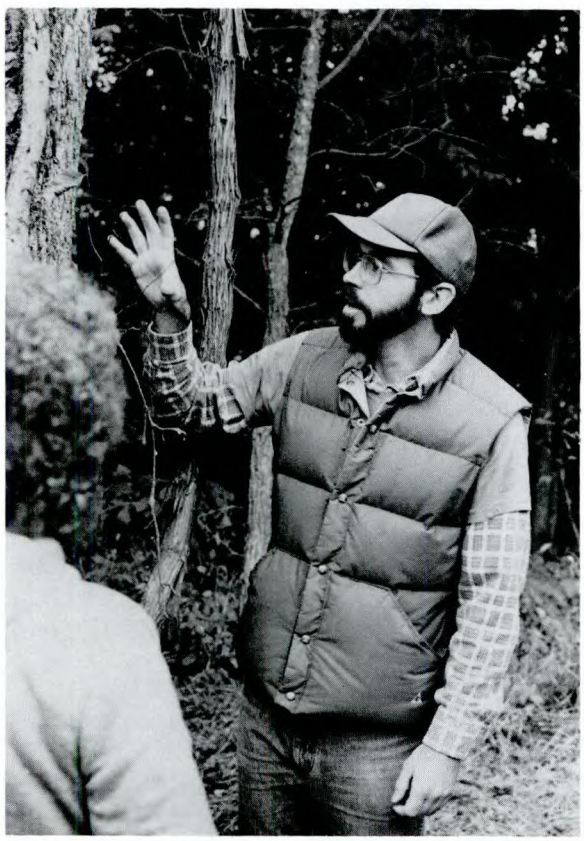
wildlife is high. Natural History has assigned an urban biologist to each area to assist citizens develop that interest or to handle wildlife problems that may arise. They conduct radio and television programs, are information sources for the media, and assist other personnel in the area.

A naturalist program coordinator assists naturalists stationed on Department areas with their interpretive programs, bringing the world of nature to visitors. He also coordinates the popular "Eagle Days" and "Prairie Days" programs of the Department, and began the "Day on the River" and "Day in the Forest" programs where Missourians get face-to-face with the natural world and relive a little of our history.

The section has taken advantage of walking as one of the most popular outdoor pleasures by building a hiking trail at Pickle Springs Natural Area near Farmington. Other such trails are planned for Ruth and Paul Henning State Forest in Shepherd of the Hills Country near Branson, at Millstream Gardens State Forest near Ironton and Sunbridge Hills Natural Area in St. Joseph.

The Natural History Section is involved in nature centers, such as Burr Oak Woods near Kansas City, which play an important part in bringing the public and the outdoors together. Plans are under way for development of nature centers in Springfield, St. Louis and Jefferson City, where an estimated half-million people each year will be able to learn and enjoy more about forest, fish and wildlife resources and the natural world. These will be managed by the Natural History Section.

Interpretation of our rich natural history is an important element of the section's mission. All of its professional staff are selected



Urban Biologist Dave Tylka helps St. Louis residents understand the natural phenomena that occur even in metropolitan environments.





At Natural History's annual Eagle Days and Prairie Days, Missourians explore their natural heritage. Botanist Ginny Wallace, above, leads a group across Hite Prairie. Below, a tot focuses on the marvels of a bald eagle at a Clarksville Eagle Day.



Outdoor recreation is on the upswing in the state, as more people than ever are fishing, hiking and bird-watching. John Wylie (in profile) interprets a nature trail at Pickle Springs Natural Area near Farmington.

for communicative skills as well as specialized biological knowledge. To help Missourians better understand and enjoy their natural world, the staff has given hundreds of talks, written scores of magazine and newspaper articles, and produced many publications.

The section has been active in publishing leaflets and books on different aspects of the outdoors. Subjects include Missouri roadside wildflowers, Missouri orchids, freshwater mussels, ferns, mosses and lichens, the pre-settlement prairie in Missouri, a natural events calendar and a poster on feeding winter birds. In press are guide books on Missouri moths and butterflies, and reptiles and amphibians. Also produced are posters and sound tapes on toads and frogs and bird calls.

Although a relatively small section within the Department, Natural History Section has already played a leading role in bringing to fruition the promises of the *Design for Conservation.*



The impact of Natural History's contribution to the Department is just beginning to be felt, as naturalists help new generations behold nature's myriad miracles.

Fiscal Section and Internal Auditor

At its meeting September 13, 1937, the new Commission got a report from Acting Director J. Frank Ramsey that it had a balance of $15,423.97 and outstanding bills of $17,769.59. The figures had been supplied by Chief Clerk Montie C. Glover, who represented the section of Budgets and Accounts. This was a holdover from the old Fish and Game Department where Glover had been chief clerk since 1933. A central Missouri native, Glover was born at Eugene, was a graduate of Pasadena Junior College in California, and had previous experience as a bank cashier. He was retained when the Conservation Commission came into being, though his services were shared with the State Park Board until 1943.

Prior to 1937, the amount of funding for the Fish and Game Department from sportsmen's fees depended on how much the legislature saw fit to appropriate. The legislature also stipulated how much could be spent on each function of the Department. Any unexpended funds reverted to the general revenue fund. In addition, from 1925 through 1936, the legislature had appropriated twenty-five percent of the annual revenue of the Department for the purchase and maintenance of state parks, and 12.6 percent of the cost of each license sold was retained by the county clerks as a handling fee.

Passage of Amendment 4 creating the Conservation Commission stabilized the financial situation and stopped diversion of hunters' and fishermen's fees to other purposes. Unexpended monies would not go to general revenue, but be retained in the conservation fund. The twenty-five percent drain to state parks was halted (parks operated under a patronage system until the General Assembly created a bi-partisan State Park Board in 1953), and the clerk's fees were added to the cost of the license.



Montie Glover had been chief clerk of the old Fish and Game Department since 1933. The new Department retained him as head of the Budgets and Accounts Section, a position he held until his retirement in 1963.

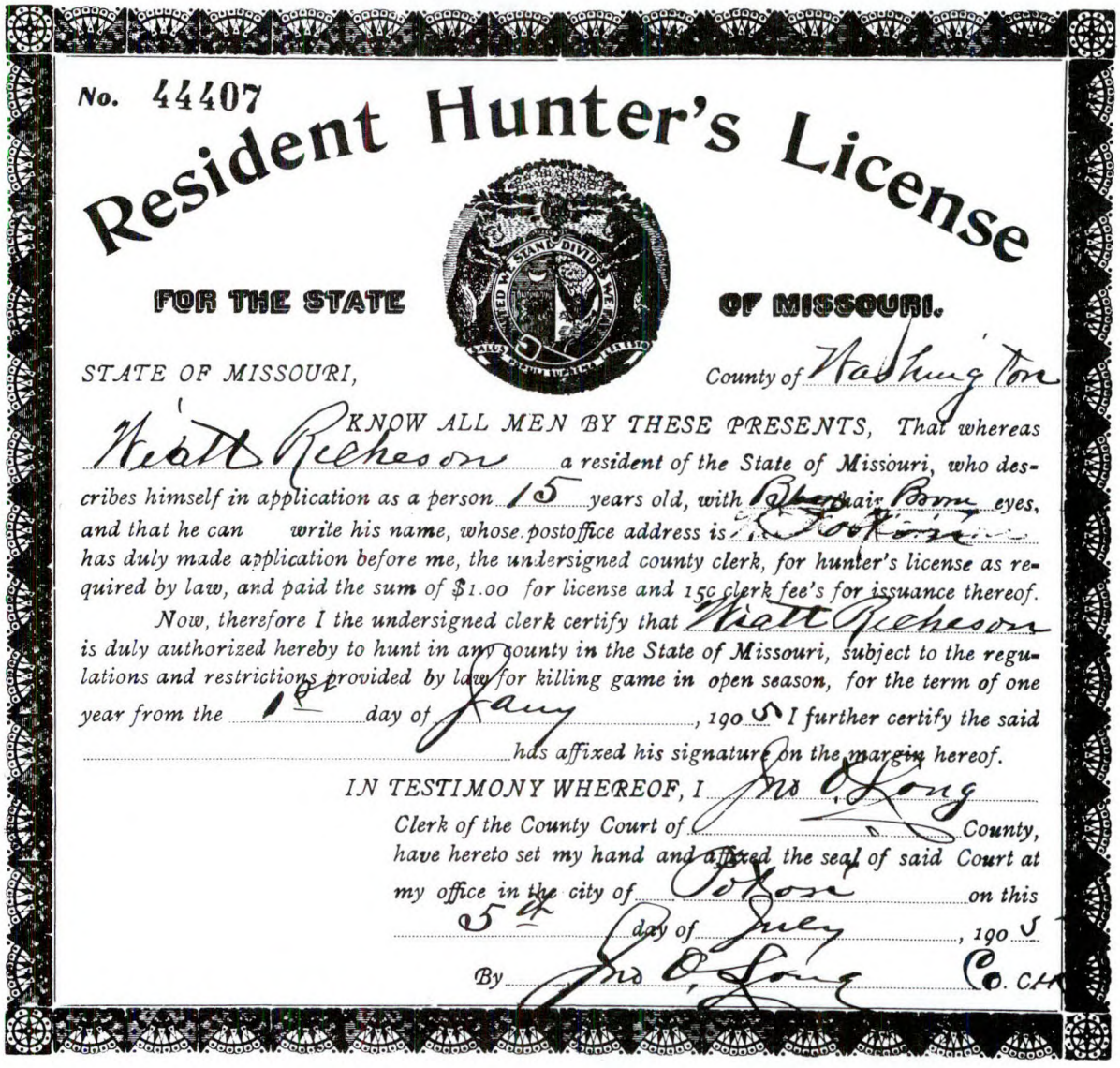
The change-over from the old Fish and Game Department required a preliminary period of retrenchment to clear up indebtedness and permit building up an operating reserve. The Department was brought to a normal operating basis by July, 1938.

In the first biennium Glover added a permit clerk to his staff, Reed Frisbie, and a bookkeeper, Dolly Musick.[1] The staff grew and in 1942 added a purchasing agent. This staff performed the bookkeeping and payroll functions and coordinated purchasing for the Department. Much of the purchasing was actually done by field personnel and bills were submitted to the chief clerk for processing.

[1] Fiscal chiefs over the years have been Montie C. Glover (1933-1937) (1937-1963), Vernon E. Sievert (1963-1977) and Aaron R. Chapman since 1977.

Bookkeeping was performed manually.

In 1948, the section was renamed the Fiscal Division. Over the years fiscal affairs had become much more complex. Many new and expanded state and federal laws and programs were initiated affecting the Department. To handle these matters, the Fiscal Division organized the following units: purchasing, accounts payable, accounts receivable, general and budget accounting, payroll and internal audit. Additional duties included the responsibility for Department inventories, surplus property disposal, and payroll deductions for OASHDI,[2] the state employee retirement program and savings bonds. The staff consisted of eleven persons in 1948, and fiscal proce-



No. 44407

Resident Hunter's License

FOR THE STATE OF MISSOURI.

STATE OF MISSOURI, County of Washington

KNOW ALL MEN BY THESE PRESENTS, That whereas Wiatt Richeson a resident of the State of Missouri, who describes himself in application as a person 15 years old, with [illegible] hair, [illegible] eyes, and that he can write his name, whose postoffice address is [illegible] has duly made application before me, the undersigned county clerk, for hunter's license as required by law, and paid the sum of $1.00 for license and 15c clerk fee's for issuance thereof.

Now, therefore I the undersigned clerk certify that Wiatt Richeson is duly authorized hereby to hunt in any county in the State of Missouri, subject to the regulations and restrictions provided by law for killing game in open season, for the term of one year from the 1st day of Jany, 1905 I further certify the said [illegible] hds affixed his signature on the margin hereof.

IN TESTIMONY WHEREOF, I Jno O. Long Clerk of the County Court of [illegible] County, have hereto set my hand and affixed the seal of said Court at my office in the city of Potosi on this 5th day of Jany, 1905

By Jno O. Long Co. Clk

The hunting license of fifteen-year-old Wiatt Richeson was issued in 1905. In 1937, sales of hunting and fishing licenses accounted for $381,962 of the young Department's $398,451 revenue.

[2] Old Age and Survivors Health and Disability Insurance.

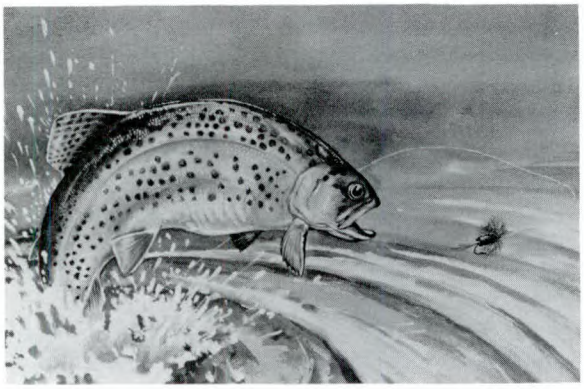
dures were becoming automated as rapidly as possible in an effort to keep pace with the increasing workload.

At first, over eighty percent of the Department's funds were derived from hunting and fishing permits. The first significant change in funding was the advent of federal aid programs for wildlife, fisheries and forestry. In addition to the Pittman-Robertson and Dingell-Johnson Acts which provided funds for wildlife and fisheries programs, there were four other sources—one state and three federal—of supplementary funds for special purposes. The Clarke-McNary Act of 1924 provided cooperative funds on a matching basis from fifty to seventy-five percent to assist in fire protection, seedling tree production and watershed protection. The Missouri Cooperative Forest Management Act of 1946 made provisions for general revenue funds for forestry purposes. The Commercial Fisheries Research and Development Act of 1964 made provisions for the promotion of state commercial fisheries research and development projects, and the Land and Water Conservation Fund Act of 1965 provided funds for the acquisition and development of outdoor recreational facilities on a fifty percent matching basis.

In the first year of the Department's existence, hunting and fishing license sales amounted to $381,962 of the total income of $398,451. Nearly $10,000 more came from other permits and the remainder of the year's income was made up of a federal forestry grant of $6,263 and money from miscellaneous sources.

Ten years later, the other sources of income became more important, but permit receipts still carried the load. The total income for 1947 was $1,507,501—the federal forestry grant had risen to $94,190, and modern forestry programs were getting a regular state appropriation that totaled $200,000.

Meanwhile, new permits were created, some of them the result of successful restoration projects such as deer and turkey. Hunting and fishing permit sales for fiscal year 1966-67, amounted to $4,419,691 of the $8 million total income. Included were new permits for deer hunting (established in 1944), turkey hunting (1960), commercial fishing and bait (1940), managed shooting areas (1958), and fees and permits on Department areas (begun in 1949). Other new permits include annual trout fishing permits, waterfowl stamps and various miscellaneous permits, each representing an added public service.



The first trout stamp, painted by Charles Schwartz, was adopted in 1969. Permit receipts continued to bear the bulk of the budget burden until the conservation sales tax went into effect in 1977.

From 1967 through 1977, permit sales revenue continued to be the major source of funding for Department programs. The collection of the one-eighth of one percent conservation sales tax began July 1, 1977, and has been the major funding source since that time. Revenue from the sale of hunting and fishing permits continues to be a strong number two source, despite a number of groups, such as senior citizens, who are now allowed to hunt and fish without buying a permit. Federal reimbursements are a distant third among funding sources. The funding of certain forestry programs from the general revenue was discontinued in fiscal year 1978, and with legislative and constitutional changes the payments to counties under the forest cropland program were shifted from general revenue to the Conservation Commission fund.

The Missouri Department of Revenue collects the conservation sales tax, along with all other state and local sales taxes, and deposits the money in the state treasurer's bank accounts to the credit of the conservation fund. All other revenues of the Department are reported to the Fiscal Section where they

are transmitted to the state treasurer through the Department of Revenue for deposit to the credit of the conservation fund.

From its inception until 1958, the Department, under constitutional authority, had received lump sum appropriations from the legislature. In 1957, the state's budget process was modernized and overhauled and the Department, along with other state departments, was asked to submit future budgets detailing needs for personal services, additions, repairs and replacements, and operations. Lump sum appropriations for capital improvements are allowed the Department.

Even though "line item" budgets were submitted to the executive and legislative branches, no substantive changes resulted in the Department's expenditure of funds. No attempt was made by the executive branch to control Department expenditures until July, 1966, when Commission-approved salary increases were rejected for payment by the state comptroller, on the grounds that they had not been specifically allowed in the budget as recommended by the governor and passed by the legislature.



Aaron Chapman was hired to head the Fiscal Section in 1977, replacing Vernon Sievert who became internal auditor.



Keeping track of a $70 million budget and a payroll of over 1,000 permanent employees engages the skills of thirty-nine Fiscal staffers.



Fiscal Section sends out over 150,000 special deer permits each year. Computer Operator Mary Ann Ashworth, above, monitors the printing of the permits in 1984.

An attorney general's opinion, rendered in 1967, exempted the Conservation Department and other constitutional agencies from this type of control. The interpretation conveyed was that the Commission has the authority to spend its funds as it deems prudent, as long as it does not exceed the amount provided in the various appropriation categories. This is probably the most significant confirmation of the Commission's fiscal integrity ever rendered.

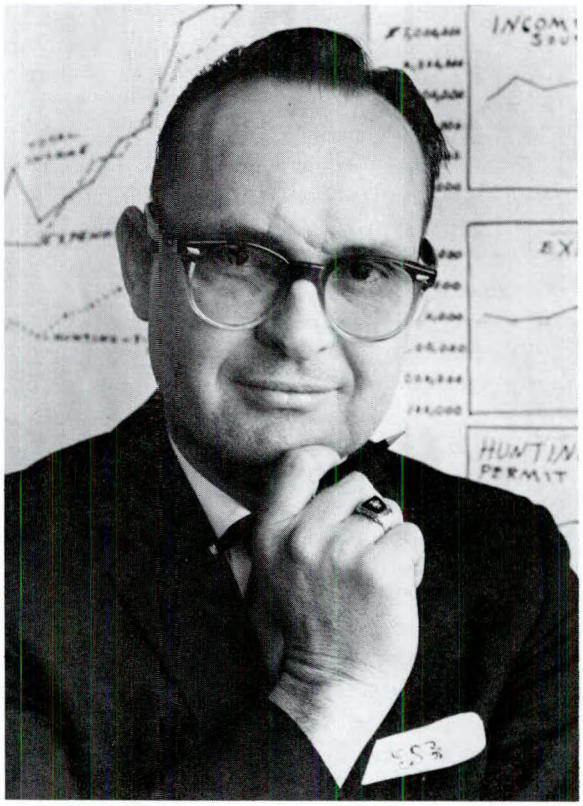
The Department presently receives two appropriations each fiscal year. One appropriation is for salaries, equipment and general operating expenses, the other for capital improvement projects such as land acquisition, construction of community lakes, river accesses and major building improvements.

The Department, through the Fiscal Section, maintains constant liaison with the Commissioner of Administration and all divisions of the Office of Administration. Liaison is also maintained with the state treasurer's office, legislative fiscal officer, state auditor, the Department of Revenue and the director of the Inter-Agency Council, along with other concerned state officials and agencies.

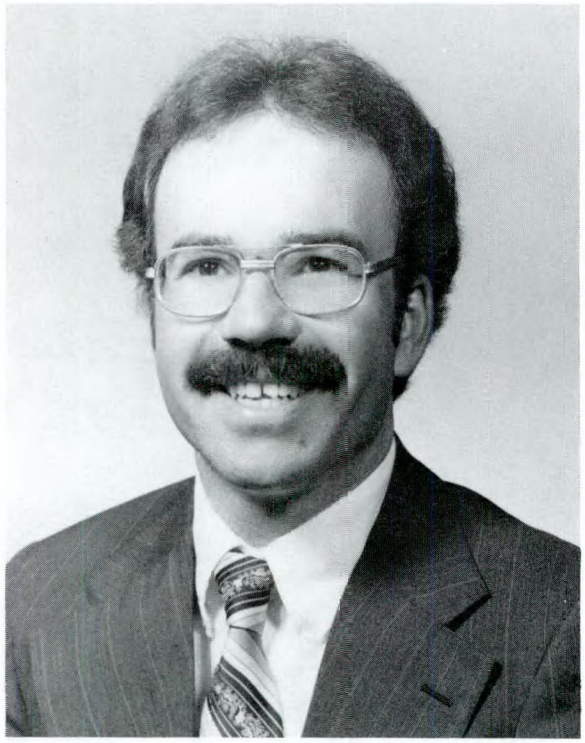
Fiscal Section works closely with the state budget office in submitting the Department's appropriation requests. A good working relationship is maintained with the Division of Purchasing. Most purchases are for field personnel and public use areas and there are times when emergencies arise which require prompt action and occasional departure from regular procedures. The Department benefits particularly from effective liaison with this office. The same liaison is maintained with the Divisions of Accounting and Electronic Data Processing Coordination units, to effect accurate payroll and accounting procedures.

Fiscal Section, reflecting the increasing complexities of fish, wildlife and forestry programs and the monetary demands of the times, is now completely automated, using computers where entries were once made by hand in old ledgers. The assignment of many new programs has forced major growth in fiscal affairs. Where once the section was composed of three persons handling less than half a million dollars, it now has thirty-nine employees handling a budget nearing $70 million.

In 1977, with the advent of a vast expansion of Department programs under the *Design for Conservation*, Director Carl Noren felt that careful review of those programs would be vital. The Department had been audited regularly by the state auditor's office, but to obviate any hint of scandal, and to insure that new programs were reviewed carefully by independent and objective analysis and appraisal, an internal auditor's position was desirable. The Commission created the internal auditor post in 1977, and Vernon E. Sievert was assigned to it. Sievert, with a background that included services for Westinghouse, General Motors and the University of Missouri, replaced Montie Glover as fiscal



Vernon E. Sievert became the Department's second Fiscal chief, replacing Montie Glover in 1963. Sievert later became the Department's first internal auditor.



Robbie B. Briscoe has served as internal auditor since Sievert's retirement in 1981.

chief when he retired in 1963.

Assigned specifically to the director, the internal auditor's job is to review operations within the Department at appropriate intervals to determine whether the divisions or sections are efficiently carrying out their functions of planning, accounting, custody and control in accordance with management instructions, policies and procedures and in a manner consistent with the Department's objectives.

When Sievert retired in 1981, Robbie B. Briscoe took over the internal auditor's position.

Income: 1937–1986, by 10-year Intervals

Source	Year first in effect (1937 and after)	Income for Fiscal Year Ending June 30 (Calendar Year 1937)	1947	1957	1967	1977	1986
Fishing Permits	1937[1]	36%	44%	58%	60%	51%	60%
Hunting Permits	1940[1]		10%	23%	22%	19%	10%
Comb. Hunt and Fish	1937[1]	64%	46%	19%	18%	30%	30%
Total H and F Sales	1937	381,962.50	1,215,085.34	2,325,598.87	4,419,691.05	6,963,047	9,049,880
Trout tags	1937	1,005.00	15,547.50	91,318.00	279,855.00	585,811	680,653
Deer tags	1944		45,009.00	255,925.00	776,460.00	2,079,440	3,565,958
Turkey tags	1960				33,150.00	274,470	1,037,069
Area permits and fees	1949			97,361.57	336,062.47	342,744	279,128
Commercial:							
Fur dealers, buyers	1937	6,100.00	11,440.00	6,025.00	4,250.00		
Fishing and bait	1940		15,998.00	39,690.00	35,320.00	107,245	133,094
Shooting areas	1958				3,800.00		
Misc permits*	1937	2,205.00	16,470.63	89,682.58	58,635.30	(With Commercial)	
Tree, timber sales	1937	163.50	8,563.70	42,770.37	80,801.21	308,912	550,598
Publication, film sales	1939		42.68	13,039.10	26,923.58	82,528	187,681
Mining leases	1959				12,477.76	15,370	23,409
Federal reimbursements	1939	prob. mainly game	17,597.83[2]				
Game	1939			221,245.99	419,844.97	2,331,658	2,685,772
Fisheries	1951			111,502.46	344,803.51	768,018	1,187,697
Forestry	1937	6,263.20	94,190.10	242,286.85	502,990.61	1,045,371	508,523
Gen. revenue grants, Forestry	1946		200,000.00	225,102.53	594,189.00	1,279,894	0
Miscellaneous income**	1937	752.59	67,556.46	34,012.17	43,232.99	1,039,023	2,406,690
Totals		**398,451.79**	**1,707,501.24**	**3,795,560.49**	**7,939,337.45**	**17,223,531**	**22,296,152**
						1/8¢ Conservation Tax	**45,320,131**
							67,616,283

* Hobby, Field Trial, Taxidermist, Wildlife Breeder, Guide, Dog Training, etc.

** 1947—Sale of Depts. Cars $ 21,231.64
Contribution to Weldon Spring $ 17,500.00
Sale of Property $ 19,803.51

[1] Reflects the percentage as it relates to total Hunting and Fishing Permit Sales.

[2] Only listed as federal aid reimbursement not broken down between divisions. Represents the amount received during these fiscal years, not necessarily the amount earned.

Engineering Section and Land Acquisition Unit

What eventually became the Engineering Section had its origin in the 1937 Land and Waters Division, consisting of a chief, E. A. Mayes, and one secretary. Mayes' services were shared with the State Park Board, since Parks was initially quartered with the Conservation Department and they shared a common fiscal officer.

Lands and Waters Division was part of the administrative staff assigned to the director; its job was primarily liaison and coordination with three Civilian Conservation Corps camps assigned to land owned by the Department. Forest and refuge development during the first two years of the Department's existence consisted of a thirty-two-acre lake at Indian Trail, ten ponds at Montauk Park, nursery improvements at Meramec Park, nine buildings, twenty-four miles of fences, seven miles of telephone lines, fifteen miles of road improvement, 413 acres of reforestation, 3,381 acres of timber stand improvement, three dams and firefighting. This was all CCC work.

During the next two years, 1939-1941, the title was changed to "Engineering, Acquisition and Construction," and the staff had grown to six permanent employees: a chief engineer, research assistant, legal counsel, engineer, secretary and stenographer. The functions included general and detailed planning for development of Department-owned properties, although construction was by CCC, Work Projects Administration and National Youth Administration personnel, and acquisition of lands for Department projects.

Mayes left the Department for military service in 1942, and was replaced by William M. Hill, who served until the end of World War II.[1] The staff remained at six, but the legal counsel was replaced by an architect. Construction by the CCC, WPA and NYA was greatly reduced. During the war years the staff was reduced to four, and emphasis was on planning for post-war projects, since shortages of manpower and materials cut development projects to the bone.

Following World War II the section, now renamed Development Section, was greatly expanded as several programs of considerable size were begun. These were the first public waterfowl shooting areas, at Fountain Grove and later Swan Lake, and the small lake construction program. Development Section was charged with the planning, designing and construction of these projects. J. Warren Smith became the chief engineer in 1945. For six months of 1945, the section was assigned to Forestry Division, but was thereafter assigned to the Fish and Game Division.

Smith was aggressive and between 1945 and 1948, the Development Section grew to thirty-six permanent employees who conducted the activities of engineering, acquisition, development, maintenance, replacement and construction for the entire Department. The lake building and public waterfowl area programs gained considerable momentum.

When Larry R. Gale became chief of Fish and Game Division in 1957, he had to coordinate Smith's aggressive building efforts, which were occasionally undertaken without consultation with other units of the Department. In 1958, Smith resigned and Floyd C. Larsen became the chief engineer, and engineering projects were brought into line with an overall planned system. As the Department acquired more public use areas, needed priorities were established as to location, planning and development.

The Forestry Division had acquired its own construction crews to handle projects for that division. Development Section was charged with major in-house construction and overseeing construction involving outside firms.

[1] Engineering Section chiefs have been Edwin A. Mayes (1937-1942), William M. Hill (1942-1945), J. Warren Smith (1945-1958), Floyd C. Larsen (1959-1963) and Charles E. Hooker since 1963.



In 1947 Department equipment rolled into action to construct the Fountain Grove public hunting area. From 1942 to 1948, the Development Section grew from six to thirty-six permanent employees.

When Director William Towell reorganized the Department in 1964, creating an Operations Section out of Forestry's construction and maintenance unit, all Department-staffed light construction and maintenance was assigned to the new section, while Engineering retained the design, heavy construction and acquisition functions. Heavy equipment was shifted to Operations, along with some personnel, in 1982.

Larsen retired in 1963, and Charles E. Hooker became chief of the Engineering Section, which was taken from Fish and Game Division and became a staff unit in 1964.[2] Then in 1977, following passage of the conservation sales tax, accelerated land acquisition began under the *Design for Conservation* and a separate Land Acquisition Unit was formed. Engineering concentrated entirely on design and construction.

With the addition of several engineers, an architect, draftsmen, soil technicians, computer capabilities and the latest electronic equipment for survey crews, the forty-five member section has been able to meet the increased demands under *Design* programs. The programs are much the same as in years past, only there are many more of them.

With increasing loss of habitat, the Department's programs are in part directed at buying land to preserve existing habitat, and construction and development to enhance habitat. Using conservation engineering principles, the section is trying to create high quality habitat to replace the lost quantity of habitat, and also provide the public with recreational and educational facilities.

Because of Bode's and Arthur Clark's initial opposition to the Department owning land, early acquisition was more by default

[2] Hooker became possibly the nation's first conservation engineer to receive the coveted American Motors Conservation Award in 1972, based in part on sound conservation engineering in developing plans for the Ted Shanks Wildlife Area.



Floyd C. Larsen was the Department's conservation engineer from 1946 through 1963, serving as chief engineer between 1959 and 1963.

than otherwise. Commissioner A. P. Greensfelder made it one of his objectives to get what is now Rockwoods Reservation into Department ownership. This was one of the first major acreages acquired in 1938, despite the objections of Bode or Clark. Rockwoods Range was purchased in 1943.

When the E. I. DuPont de Nemours Company offered lands along the Mississippi River to the Department, also in 1938, they were gladly accepted by the Commission and assigned to the Forestry Division. Two years later Caney Mountain Refuge was purchased to aid in deer and turkey restoration.

State Forester George O. White, who had been involved in acquisition for the U. S. Forest Service, had a different view of land ownership. He felt the Department should own land as state forests, which would be demonstration areas of good forest management. The Department had inherited about 34,000 acres of land from the old Fish and Game Department that had been acquired but never developed as state parks. White named these state forests and little by little, a parcel here and a parcel there, all at rock bottom prices, he acquired additional acreage for forestry purposes.

In late 1944, Melvin O. Steen replaced Clark as Fish and Game Division chief, and he strongly believed in acquiring lands for hunting and fishing purposes. Meanwhile, Bode somewhat shifted his own position on acquiring lands. When, in 1947, there came an offer of cash from Mrs. August A. Busch for purchase of the Busch Memorial Wildlife Area, Steen urged its acceptance. It was under Steen that Fountain Grove (1947) and Duck Creek (1951) waterfowl areas were acquired, and the lake building programs adopted. He acquired Peck Ranch Wildlife Area in 1945, which became the focus of turkey restoration efforts.

Through the years, land acquisition was handled by Engineering Section for the divisions, with the assistance of the Department's



Charles E. Hooker replaced Floyd Larsen as chief engineer in 1963. He won the coveted American Motors Conservation Award in 1972 for "exceptional service to conservation."

legal counsel. James D. Beets was transferred from his Field Service agent position to the job of land acquisition agent in 1952.[3] When the stream access program was begun in the late 1950s, Carl Noren was assigned to seek out and acquire desirable accesses. About 1967, Clarence "Salty" Daniel was assigned the task of working with citizens wishing to donate lands or funds to the Department, but major land acquisition remained in Engineering Section until after passage of the conservation sales tax in 1976.

A separate Land Acquisition Unit was established in anticipation of more active land purchasing under the *Design for Conservation* program, and Ronald E. Thoma was named to head it.

A major goal of *Design* was the purchase of 300,000 acres of land for many purposes. Currently, the Department has accomplished



Edgar B. Biffle headed the Land Acquisition effort from 1956 to 1973. He was a biologist by training and supervised a 1948 cover restoration program.

Realty Agent Pam Boatright checks deed descriptions for land purchased by the Department. She joined the Department in 1986.



[3] He was followed by Edgar B. Biffle in 1956, and Ronald E. Thoma in 1973.



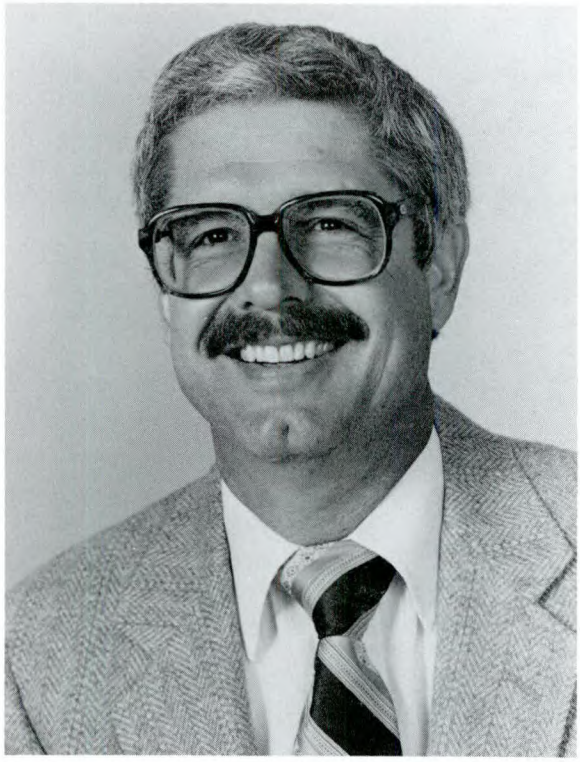
In 1967, Clarence "Salty" Daniel was assigned to work with citizens interested in donating lands or funds to the Department.

about two-thirds of that goal, though emphasis is gradually shifting from acquisition to development, to assure optimum enjoyment by all interests. Fourteen new upland areas and additions to existing areas have been purchased, totaling 33,800 acres. There have been eighteen special feature areas, ten natural areas and eight urban "wild acres" areas bought, totaling 5,360 acres. The Department has acquired 1,800 acres of native prairie in ten separate tracts, and acquired nearly 150 areas which provide habitat protection and access to 170 miles of seventy different Missouri streams. Seven areas acquired have existing lakes with 453 acres of water, and eight new lake sites have been purchased. Lakes have been built on six of these sites, adding 519 more acres of water.

During the campaign for passage of Amendment 4 the Commission pledged that it would not resort to its powers of eminent domain and condemnation. These powers had been used sparingly in the past, usually only in friendly court cases to settle estates. Refusing to exercise eminent domain sometimes forces the Department to drop projects if it cannot secure necessary lands in negotiation, but the policy favors the good neighbor image.

All lands bought are from willing sellers, and purchases are made following appraisals by disinterested, outside parties. It is a tribute to the Commission's good reputation that lands often are offered for sale below appraised values, and many as part of a donation package from citizens interested in furthering the cause of conservation or wishing to memorialize a friend or relative.

The Land Acquisition Unit, which presently consists of four persons, receives much help in its activities from personnel of other divisions and the Department's legal counsel.



Ron E. Thoma was named head of the new Land Acquisition Unit, established in 1976 in anticipation of increased funds from the conservation sales tax.

Personnel Section

When the Department began operations in 1937, no one was designated to handle personnel management responsibilities. Each division, and often each supervisor, shouldered the duties. Reading over the minutes of Commission meetings, it is interesting to note how big a part the commissioners themselves played in recruiting and handling employee problems.

Commissioner John Case objected to hiring married women, on the grounds they ought to be home tending to their families. He was overruled by the rest of the commission, but it points up the interest commissioners exhibited in the employee picture—and their biases! They were breaking new ground, and wanted assurance that things would go right, hence their interest in matters that today are routinely handled by personnel systems. For example, the commissioners did the interviewing for the first conservation agents, splitting the chore among them. But as time went on, they participated less and less, although even today no employee is hired or fired without commission approval.

By 1958, the work force had grown to 466 employees and Director William Towell decided a more formal system was needed to handle employee matters. The Commission approved appointment of a personnel officer and Ray M. Wells, who had been heading the Field Service Section, was given the job.[1] His task was to standardize such functions as recruitment and selection, personnel record keeping, and benefits administration. Implicit in the charge was the study of programs that might more closely knit a growing organization. The Director appointed a personnel committee composed of some of the top administrators to review all personnel matters, and the personnel officer works largely through this committee.

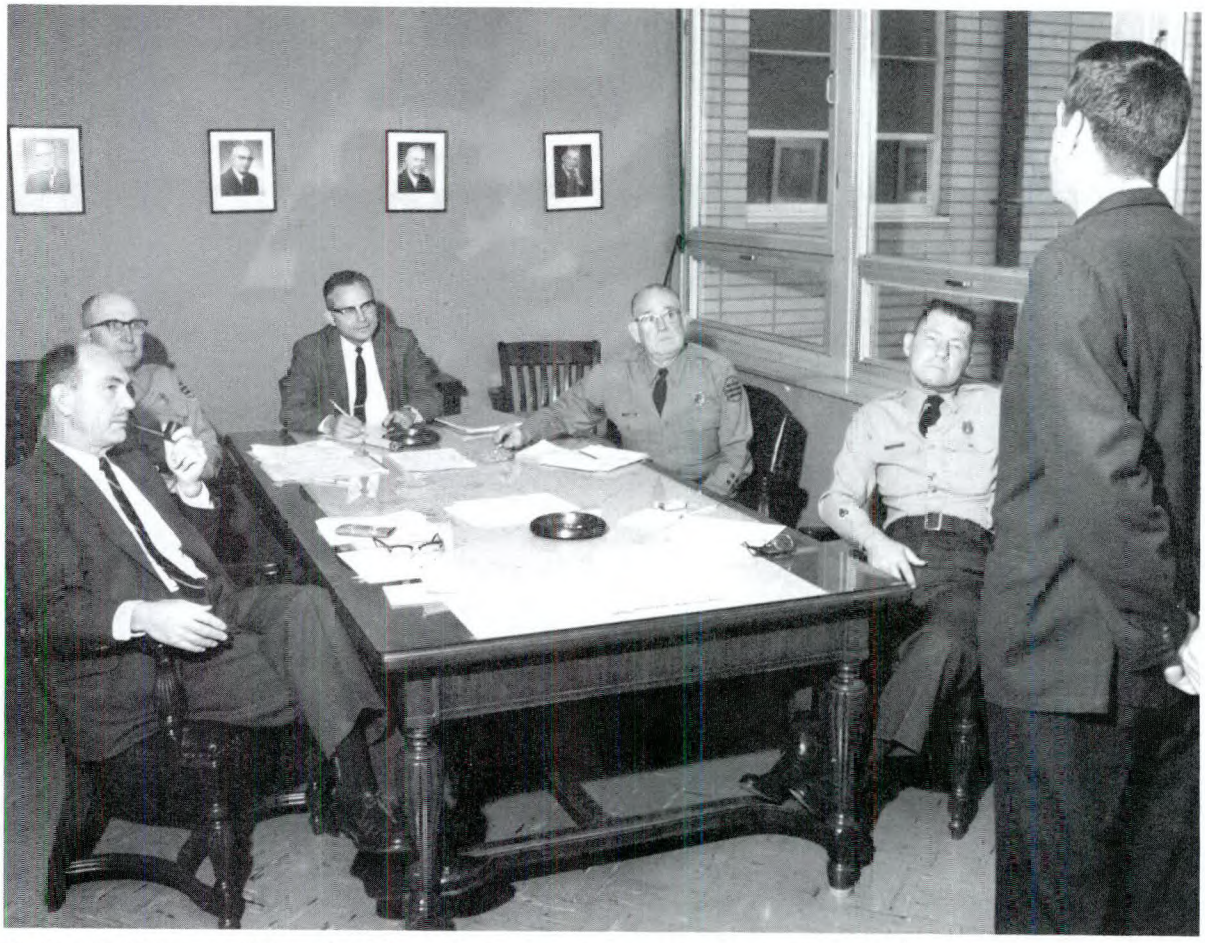


Ray M. Wells, former Field Service chief, was picked to head the new Personnel Section in 1958. Director Towell felt a work force of 466 employees needed a permanent framework for personnel functions.

Any agency has three resources to manage: physical, financial and human. The Personnel Section's job is to elicit the most effective use of the human resource while providing personal satisfaction to them. Some of the functions that accomplish this are (1) personnel policy development and research, (2) recruitment, selection and placement of the best employees possible, (3) benefits administration, (4) performance appraisal and records maintenance, (5) compensation and classification administration, and (6) training and development.

Personnel policies are necessary for supervisors to act in a consistent manner when faced with similar situations. It is Personnel's

[1] Personnel officers have been Ray M. Wells (1958-1975), Gerald L. Howell (1975-1977) and Roger E. Ponder since 1977.



Early selection procedures for job applicants included extensive testing, but these were abandoned in 1976. Here, a candidate for a job in 1963 is interviewed by Dan Saults, Vernon Bennett, Ray Wells, James Bailey and Paul Brooks.

job to recommend to administration policies that develop a climate for effective performance and uniformity of action. Such policies, whether new or revised, are reviewed by the personnel committee before submission to the director and Commission for adoption.

In recruitment and selection of manpower the Department has enjoyed an embarrassment of riches. Its reputation is so good and competition so keen for most jobs that screening applicants is a major chore. Using job opportunities announcements, advertisements, college recruitment and application files, Personnel can provide supervisors with a wide selection of applicants to consider.

Early selection procedures included a battery of pre-employment tests, including general intelligence tests. These were abandoned in 1976. The customary written and oral examinations required for conservation agent trainees were dropped after 1977, when the Commission approved a change in educational requirements from high school completion to graduation from an accredited college with a bachelor's degree in appropriate fields. Instead, a panel of Department employees (and sometimes knowledgeable outsiders) question applicants about job knowledge and skills to determine the best individual for the job.

Employee benefits, apart from salary, make up a part of the total personnel package administered by the section. In 1960, a group



Personnel Section has guided the standardization of recruitment and interview processes. The procedure includes wide advertisement of job openings, initial screenings conducted by Personnel and an interview panel made up of Department employees.

health and life insurance program was implemented which was mandatory for all male employees except those over age fifty-five. Female employees could choose to participate. In 1978, enrollment became voluntary for all employees. Beyond the insurance benefits, Personnel Section has responsibility for retirement, leave systems, unemployment insurance, wellness and employee assistance programs, special achievement awards and service awards.

It is important for both supervisors and employees to know how they are doing on the job, and the Department has had some form of job performance rating system for many years. These records, along with other information regarding employee work history, are centrally maintained by Personnel Section.

It was in the area of compensation and classification that the biggest personnel flap occurred in 1974. The Department hired a personnel consultant to develop a revised pay plan and job classification schedule. It was the latter that caused an uproar as old relations between various jobs, going back many years, were recommended for change under a point-factor method used to classify positions. Employee morale suffered and the Director ordered the personnel committee to revise the plan to be more acceptable. This was done and three pay schedule classes were established: labor and trades, professional and managerial, and general service, and three

salary schedules were adopted. The modified system is in use today.

Recognition that employees must be afforded an opportunity for development led Personnel Section into training and development programs. Throughout the years a variety of workshops and seminars have been conducted on topics ranging from communications and human relations to supervisory and management techniques. The Section also handles the new employee orientation class, where new employees are given an intensive one-week course in all Department programs and functions. It also participates in conservation agent training classes, enforcement training and safety training classes.

The Personnel Section prepares and maintains, with the assistance of other Department staff, special printed materials such as the Job Description Manual, Administrative and Personnel Management Manual and special memoranda on current developments in procedures and operations.

Since its inception in 1958, Personnel Section has grown along with the Department. There now are four professional and six clerical personnel handling the complex affairs relating to Department employees. The Department now totals over a thousand permanent employees, all with needs and aspirations that must be met in order to most effectively manage the state's wildlife and forestry resources.



Personnel Section offers employees in-house training in diverse aspects of job effectiveness. Topics ranging from management techniques to communications meet the needs of a work force that has grown to over 1,000 permanent employees.

Planning Section

Planning Section became a separately designated administrative section as part of Department reorganization in 1964, with Edwin H. Glaser as its chief. Its roots, however, extend back to 1946, when the Department found it necessary to establish liaison with the U. S. Army Corps of Engineers to safeguard the state's fish and game interests in river basin planning and developments. This was during the era of big dam construction, when it seemed most of Missouri's free flowing streams were candidates for major alterations. The assignment was first located within the Fish and Game Division, later on the director's staff, and was ably filled by Carl R. Noren for many years.

Personnel strength in 1964 consisted of two—Glaser and Noren—with secretarial assistance provided as needed. Today the staff numbers eleven, headed by Dan F. Dickneite since 1984. Although it is called the Planning Section, the title does not adequately convey the scope of its work, which is divided between section administration, the planning branch and the environmental branch. Added responsibilities are social research, federal aid administration, land acquisition coordination, wildlife economics and policy research.

The original assignment was broadened to include liaison with other agencies and groups in the field of outdoor recreation or natural resource projects and planning. A unique assignment in 1964 came about when Director William E. Towell was designated by Governor Warren E. Hearnes as state liaison officer to the U. S. Bureau of Outdoor Recreation, with instructions to develop a plan to initially qualify Missouri for federal matching Land and Water Conservation Fund grants. The outcome was *Outdoor Recreation in Missouri-Preliminary Plan 1965,* which made Missouri eligible for the federal funds and became the basis for continuing accelerated activity in the outdoor recreation field.

The last forty years have seen a tremendous growth in the number of groups involved in outdoor recreation or natural resource projects—federal, state, and private—and in the variety and scope of their activities. For example, a recent tally revealed the Planning Section working with or through some fourteen federal agencies, plus Missouri's congressional representatives, four state departments, the governor and other elected officials, similar agencies in seven adjacent states, and fif-



Carl Noren was appointed to head up a Planning unit first located within Fish and Game Division. Fish and game habitats, including wetland areas for waterfowl, needed protection during the era of big dam building by the Army Corps of Engineers.



Planning Section was established as a separate entity in 1964 with Edwin H. Glaser as its chief, above.

teen private organizations involved in resource use, conservation or management. All of these affect the Department's resource responsibilities in one way or another. It is the Planning Section's charge to keep abreast of all these possibilities through its primary function of coordination and liaison. It operates with limited professional staff by calling upon staff and specialists throughout the Department for assistance, data and advice.

Much of the resource planning concerned with water policy—legislation, impoundments, stream and river basin studies—is within the environmental branch. The underlying philosophy is to participate in as many plans, studies and programs concerned with water and related land resources as possible, so as to best represent the fish, forest and wildlife interests of the state. Both the water and land base are critical in shaping successful Department programs and in maintaining a quality

Environmental Coordinator Joe Bachant, below, and other Planning staffers gather data, develop priorities and act as liaisons with other agencies in land and water issues.



environment in Missouri.

There are no particular ties to any Department division or point of view: the section serves as a focal point for gathering information and developing a position or policy agreeable to all, and to represent the Department's views at meetings and public hearings.

The planning branch was established in 1977, following passage of the conservation sales tax amendment. Responsibilities of the unit include long-range planning, coordination of land acquisition and capital improvements, and program evaluation based on socio-economic research. Knowing what people believe, perceive and desire is critical to Department programming.

Planning Section assumed responsibility for federal aid coordination in 1984. Federal Aid had formerly operated as a separate unit without total responsibility for all Department federal aid, which includes forestry as well as fish and wildlife. This function includes documentation, bookkeeping, vouchering and audit responsibility for $5,000,000 to $6,000,000 in federal grants each year, and is administered through the environmental services officer.

The results of the Planning Section's work cannot be satisfactorily measured in terms of units of fish, wildlife or forests. The effect is reflected, rather, throughout the programs of the entire Department, in better resource management and in the enhancement and coordination of programs with other agencies to secure the best possible stewardship of fish, wildlife, forests, and the lands and waters that support them.



The best possible stewardship of fish, wildlife and forests means effective planning. The duties of Planning Section include long-range forecasting of public needs regarding land and water resources, coordinating land acquisition and development, and evaluating existing programs based on socio-economic research. The results are public lands and programs designed for conservation and effective public service.

Operations Section

As early as 1942, the Forestry Division recognized a need for services that were later to become duties of the Operations Section. State Forester George O. White hired Robert F. Wells, a former U. S. Forest Service employee and CCC foreman, to do construction work.

There was a need for lookout tower construction, including building roads into the towers. There was a need for construction of fire trails to get crews back into the forests. Forest district headquarters, dwellings for towermen, and service buildings were needed. There was a need to service and maintain the vehicles and equipment used to fight fires, and Wells was given the job of supervising all this activity.

The Department had perhaps 42,000 acres in refuges at Deer Run, Indian Trail and Sam Baker, plus six fish hatcheries. There was a minimum number of buildings on these properties, mostly machine sheds and dwellings for a resident manager. There was no established maintenance procedure and each division made its own arrangements for acquisition, construction and maintenance. For years the Department emphasized acquisition and development of public use areas and other properties, but gave relatively little attention to maintenance. The Forestry Division was the first to develop a systematic approach to such holdings.

At last recognizing the need for some Department-wide maintenance system, Director William Towell created an Operations Section as part of the reorganization of 1964, naming Robert F. Wells Operations officer.[1]



Forestry made use of the first construction crews to build much-needed lookout towers for forest fire control.

The purpose of organizing the section was to group together various services common to all Department units to eliminate duplication of effort, personnel and equipment. The new section was given the responsibility for administration and coordination of several functions including maintenance and construction improvements, management of the two-way radio system, purchase and repair of equipment, operation of aircraft and the con-

[1] Wells served as Operations officer until his retirement in 1976. He was followed by Forester David D. Hurlbut until 1986 when Everett E. Clark became chief.



Robert F. Wells was Operations officer from 1964 until his retirement in 1976.

struction of signs.

In its first year, Operations Section had twenty-nine employees, most transferred from Forestry Division. It has since grown to 108 permanent and twenty-four full-time/temporary employees to handle the demands of the new responsibilities added over the past twenty-one years. Each of the particular skills is operated as a unit: administration, construction and maintenance, equipment, headquarters and research center maintenance, radio, aircraft, signing and safety.

When the section began in 1964, the construction and maintenance unit's primary responsibility was to assist the managing divisions with maintenance of improvements and to handle small development projects involving light construction. Maintenance standards and procedures were established to enable the Department to obtain the best results from its improvements at the least annual cost.

In October, 1982, construction personnel and equipment were transferred to Operations from Engineering Section and all construction to be completed by in-house crews was assigned to the section.

For several years after Operations Section was formed, a variety of approaches were used for maintenance of properties. On areas with resident personnel, Operations would send in skilled personnel as needed to assist with maintenance projects. Conservation agents hired local labor and equipment to maintain accesses, community lakes and unmanned upland wildlife areas. But as managing divisions' workloads increased, it became more difficult for them to allocate their resources to maintenance. As a result, most maintenance projects on both manned and unmanned areas are handled by Operations. Routine maintenance of accesses and lakes



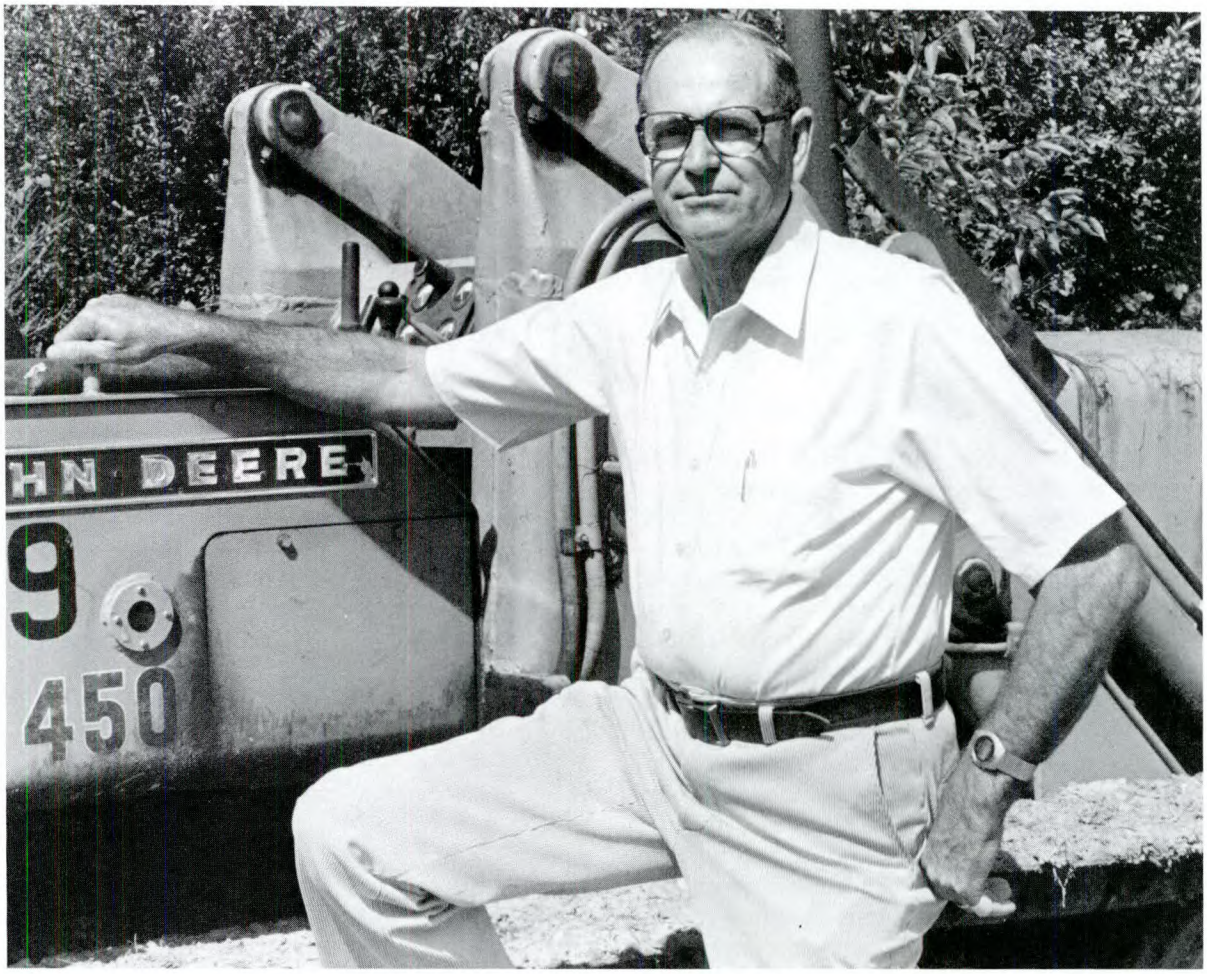
Operations Section maintains 1,160 miles of roads. In this 1956 photograph, equipment is guided over a new roadbed leading to a lookout tower.

in north Missouri is provided by this section. In south Missouri, Forestry Division maintains such areas, using contractors and its own personnel when not required for forestry duties.

The Department currently owns approximately 515,700 acres of land with over 1,200 buildings and 1,160 miles of roads, in addition to many miles of levees, a multitude of structures, parking lots and other improvements. For all these the Operations Section develops equipment purchase specifications, establishes maintenance standards, inspects and repairs equipment, develops replacement criteria, and disposes of used vehicles and other equipment. During the most recent fiscal year it purchased $2,666,457 worth of equipment, and recovered $519,704 from sales of used vehicles and equipment.

In 1948, Forestry set up a preventive maintenance program and established a small Central Repair Shop in an old CCC building at Sullivan. Its equipment, and that of other divisions, was brought there for repair for several years. In 1957, a new shop was constructed at Salem, which was more centrally located. Although operated by the Forestry Division, it did maintenance work for all Department units.

When Operations Section was formed it took over the Central Repair Shop and began serving all divisions and sections. Its function



Operations Section is responsible for purchasing and maintaining millions of dollars worth of equipment, from radios to bulldozers. Marvin Holland, above, guided maintenance and construction projects for Forestry before Operations Section was established in 1964.

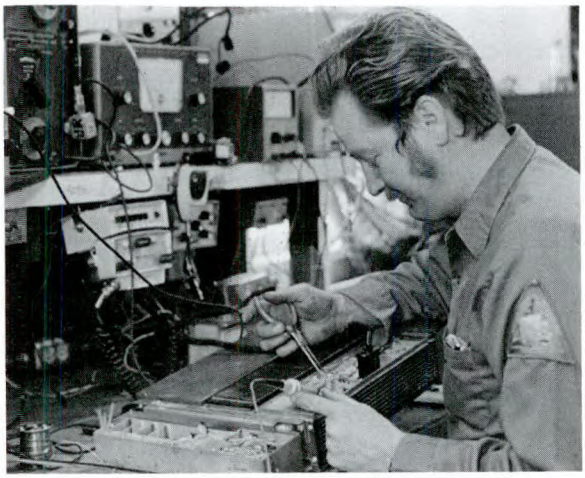
is to receive, equip and assign new vehicles and equipment, perform inspections and repairs. A similar facility was constructed at Brookfield in 1975, and one-man shops have been established at August A. Busch Memorial Wildlife Area, Waters-Moss Wildlife Area, Jefferson City headquarters and Ted Shanks Memorial Wildlife Area. Another is being built at Springfield in conjunction with the new regional headquarters there. Operations provides general fleet management services essential to the efficient operation of 922 highway vehicles, 480 trailers and 210 motorized non-highway units.

There were no two-way radios in use when the Conservation Commission came into being. The first such use was by Forestry Division about 1940. These first radios were rather crude affairs, powered by dry cell batteries on the AM frequency. A few were placed in lookout towers and others carried in vehicles. When one operator wished to communicate with another he had to stop his truck, place the radio on the exterior, toss an antenna wire over a tree limb and then attempt to call the other person.

About 1944, sets for permanent installation in vehicles were obtained on a limited basis. They were still AM units and their assignment was confined to the Forestry Division. In 1945, the first radios of this type were purchased for Protection Section. In 1947, war surplus FM radios became available and were assigned to Forestry and Protection divisions. The present radio system evolved from this beginning.

By 1964, a squeeze on available frequencies became so great that the Department was advised to go to a different frequency range. Design changes were worked out and the first new equipment was installed on the West Plains forest fire protection district in 1965. This new equipment furnished more efficient operation and allowed positive communications, free from interference from others. Prior to that, conservation agents often could hear the Georgia conservation officers better than they could Missouri's, as both states were on the same frequency.

The Department now owns and operates the largest radio system in Missouri. It includes sixty-one base stations, 138 mobile relays, 731 mobile radios and 536 portables. It's comforting for conservation agents, foresters and others working alone at all hours of the day or night to know that assistance can be reached by the press of a button. Radio cuts down on miles of travel time and reduces other communications expenses.



The Department owns the largest radio system in the state. Operations oversees use of over 1,400 mobile units and radio repair shops at seven locations in the state.

Operation Section presently maintains 1,446 pieces of radio equipment at radio repair shops located in Jefferson City, Sullivan, Piedmont, Willow Springs, Brookfield, Blue Springs and Springfield. It has the responsibility for interpreting and maintaining compliance with rules and regulations of the Federal Communications Commission. It writes specifications for new equipment, handles the purchase, installs and repairs the units used by the Department.

The first Department aircraft, purchased in 1946, was a Stinson L-5. Harold V. Terrill, who was an aerial artillery spotter in World War II, was the first employee to use an airplane for Department work. The next purchase was a Stinson Station Wagon plane in 1949. Aircraft were first assigned to the Fish and Game Division, which supervised their use and maintenance, but they were piloted by personnel of the division using them. In 1954, a Piper Super-Cub was purchased and assigned to the Forestry Division. It was based at Ellington and flown by personnel of the Deer Run district.

In 1955, Conservation Agent Allen C. Hoefelman, a former military flight instructor, was assigned full-time as Department chief pilot. The responsibilities for all Department aircraft were transferred to him under the Director's office.

Late in 1959, the Forestry Division obtained a C-45 Twin Beech aircraft through the federal excess property program. This plane, which had a seating capacity of seven, was placed in service in mid-1960, along with another plane that had been based in Columbia. Both were housed in a new hangar built that year at the Jefferson City airport. The aircraft based at Ellington was moved to Jefferson City in 1962.



Chief Pilot Allen Hoefelman, left, and Pilot Ralph Hibdon, right, made up the Department's "air force" for many years. The plane is a Cessna 180.

Operations Section took over aircraft administration after its creation in 1964. The section currently operates three aircraft, all based in Jefferson City. The unit is staffed by a chief and three pilots.[2] Uses of aircraft have been expanded from fire detection, law enforcement and personnel transportation to a wide range of activities connected with fish, forestry and wildlife management. These include wildlife census, water pollution investigation, forest disease and storm damage surveys, location of wildlife release sites, aerial land surveys for potential acquisition, wildlife and fish transportation, photography and aerial radio telemetry studies on wildlife and fish. Total flying time has grown from 250 hours in 1946, to 1,407 hours in 1986.

As one drives around the state one of the most visible signs of the Conservation Department is the routed wood, brown and white signs on public use areas that have become a Department trademark. There was no sign program in 1937, but as the Department acquired facilities the need for signs grew. Each area prepared its own signs and they were produced in all sizes, shapes and colors.

The original sign shop was set up by Forestry in 1954, at the repair shop in Sullivan. This was relocated to the Salem shop about 1957, and the staff later increased from one to four.

Since 1965, this facility has provided all signing for the Department. A sign manual and catalog was developed, which established policy, guidelines and procedures. Uniformity and consistency have been greatly improved in signing all public use areas as a result. The sign shop employs modern technology in its silk screening process, which is the method most used in sign construction, but it also produces plastic signs as well as specialty items. Vandalism and wear and tear create a need for many signs and in a recent year the shop produced 34,000 signs.

The Operations Section coordinates all highway signing for the Department with the State Highway and Transportation Department.

The Department of Conservation was one of the first agencies of state government to recognize employee safety as a priority and to react positively with an active loss-control program. In the spring of 1971, the first Department-wide safety program was launched with appointment of a safety committee. Accident reporting procedures were established and several training programs conducted.

On May 1, 1976, a full-time safety coor-

[2] When Hoefelman retired in 1982, Cullen H. Wilson became chief pilot.

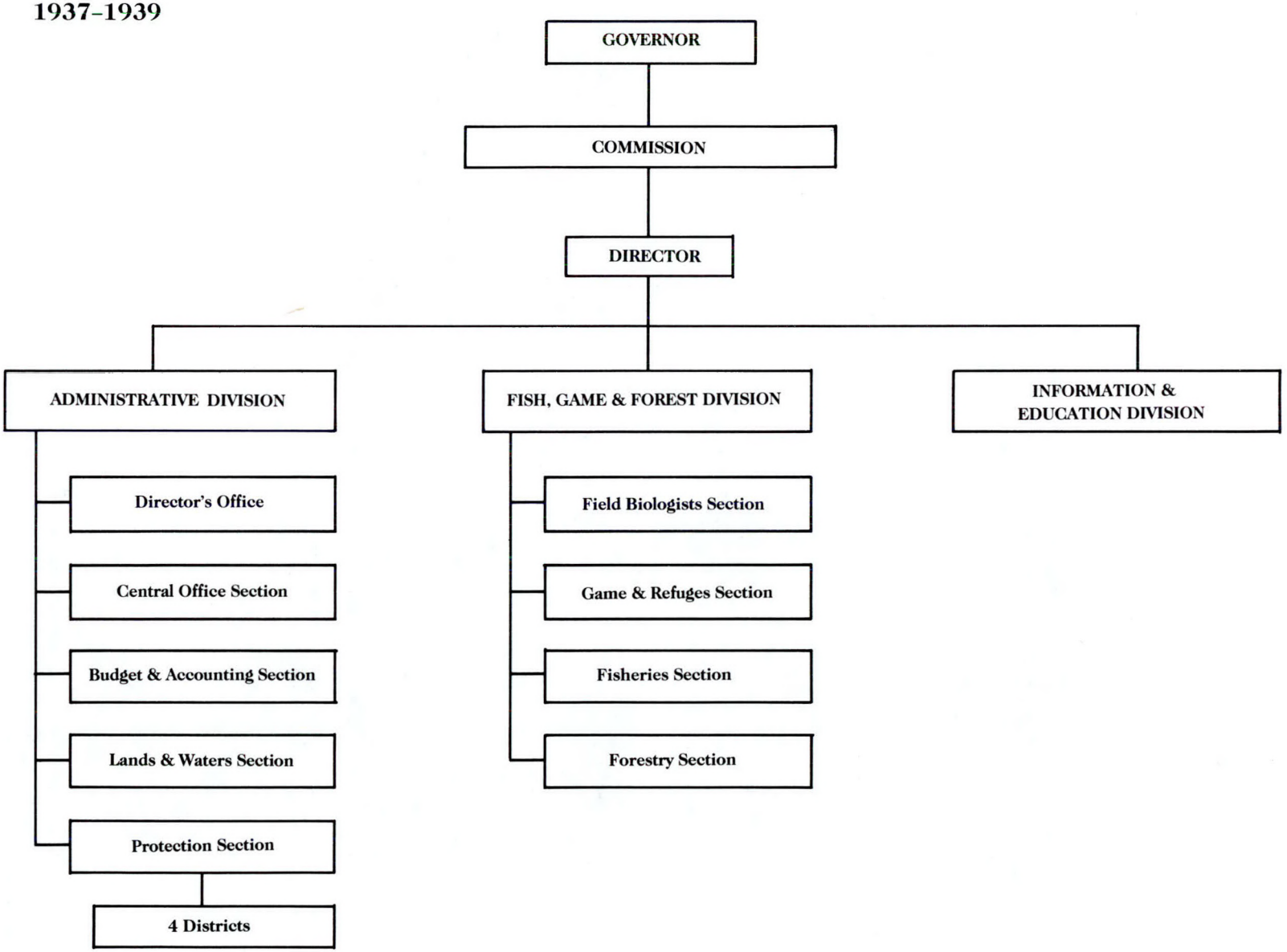
dinator, James R. Watson, was employed and responsibility for the safety program was lodged with Operations Section.[3] Accident prevention programs now assigned to Operations include employee loss-control, industrial safety, vehicle accident prevention, worker's compensation, safety education program development, hazard identification on public land, and claim investigations of public liability mishaps. Additionally, the safety coordinator performs risk management functions in the purchase of vehicle/aircraft liability insurance, aircraft hull and liability insurance, building fire and peril insurance, and monitoring the self-insured aspects of worker's compensation and public liability.



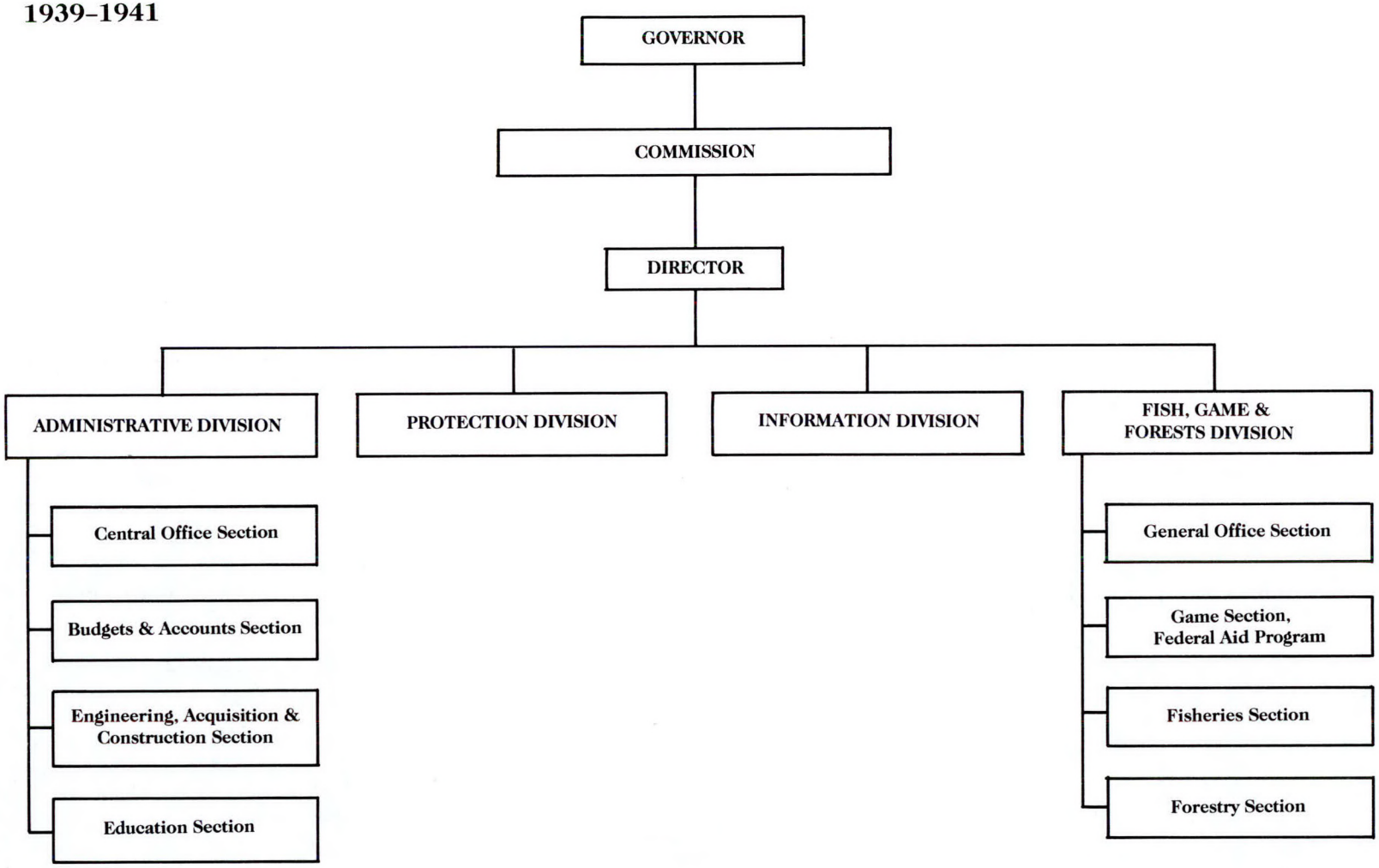
Late Safety Coordinator James Watson and Director Larry Gale demonstrate "The Convincer" during a campaign for seat belt use in 1985.

[3] While inspecting a Department shooting range near Marshall September 9, 1986, Watson interrupted a robbery and shooting and was himself murdered along with three other men. He is the only Department employee to have been murdered in the line of duty.

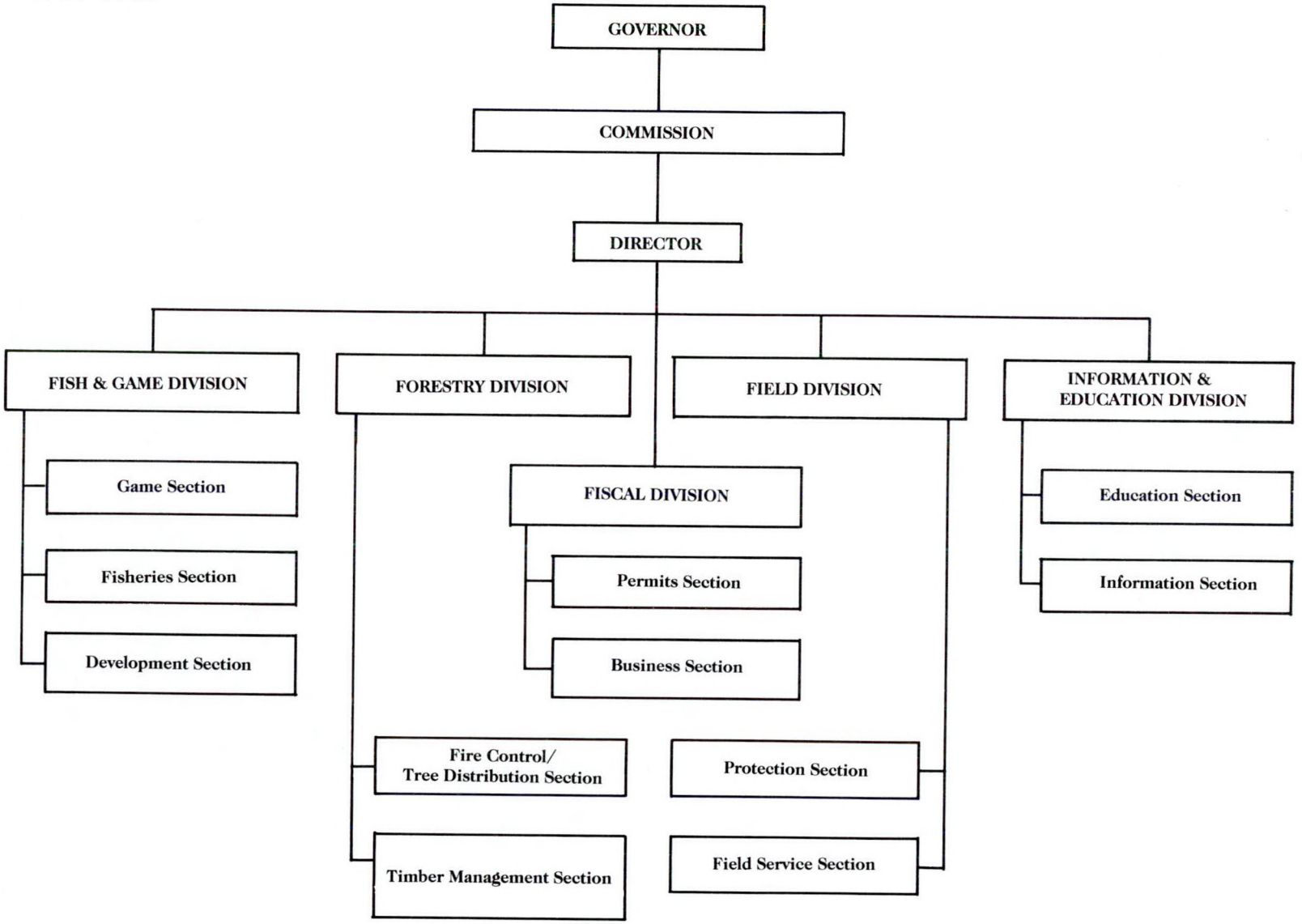
1937–1939


GOVERNOR
COMMISSION
DIRECTOR
ADMINISTRATIVE DIVISION
Director's Office
Central Office Section
Budget & Accounting Section
Lands & Waters Section
Protection Section
4 Districts
FISH, GAME & FOREST DIVISION
Field Biologists Section
Game & Refuges Section
Fisheries Section
Forestry Section
INFORMATION & EDUCATION DIVISION

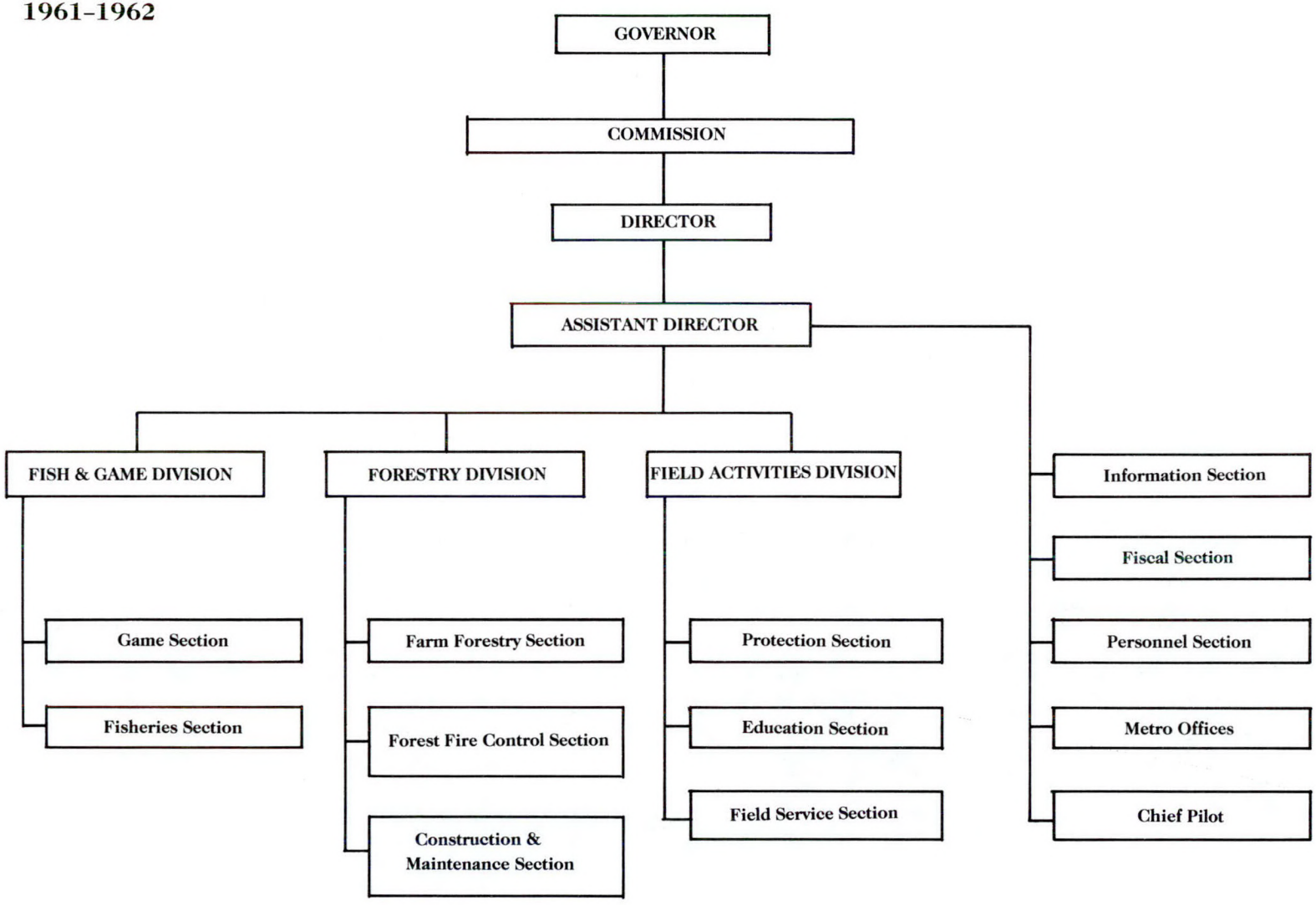
1939–1941


GOVERNOR
COMMISSION
DIRECTOR
ADMINISTRATIVE DIVISION
PROTECTION DIVISION
INFORMATION DIVISION
FISH, GAME & FORESTS DIVISION
Central Office Section
Budgets & Accounts Section
Engineering, Acquisition & Construction Section
Education Section
General Office Section
Game Section, Federal Aid Program
Fisheries Section
Forestry Section

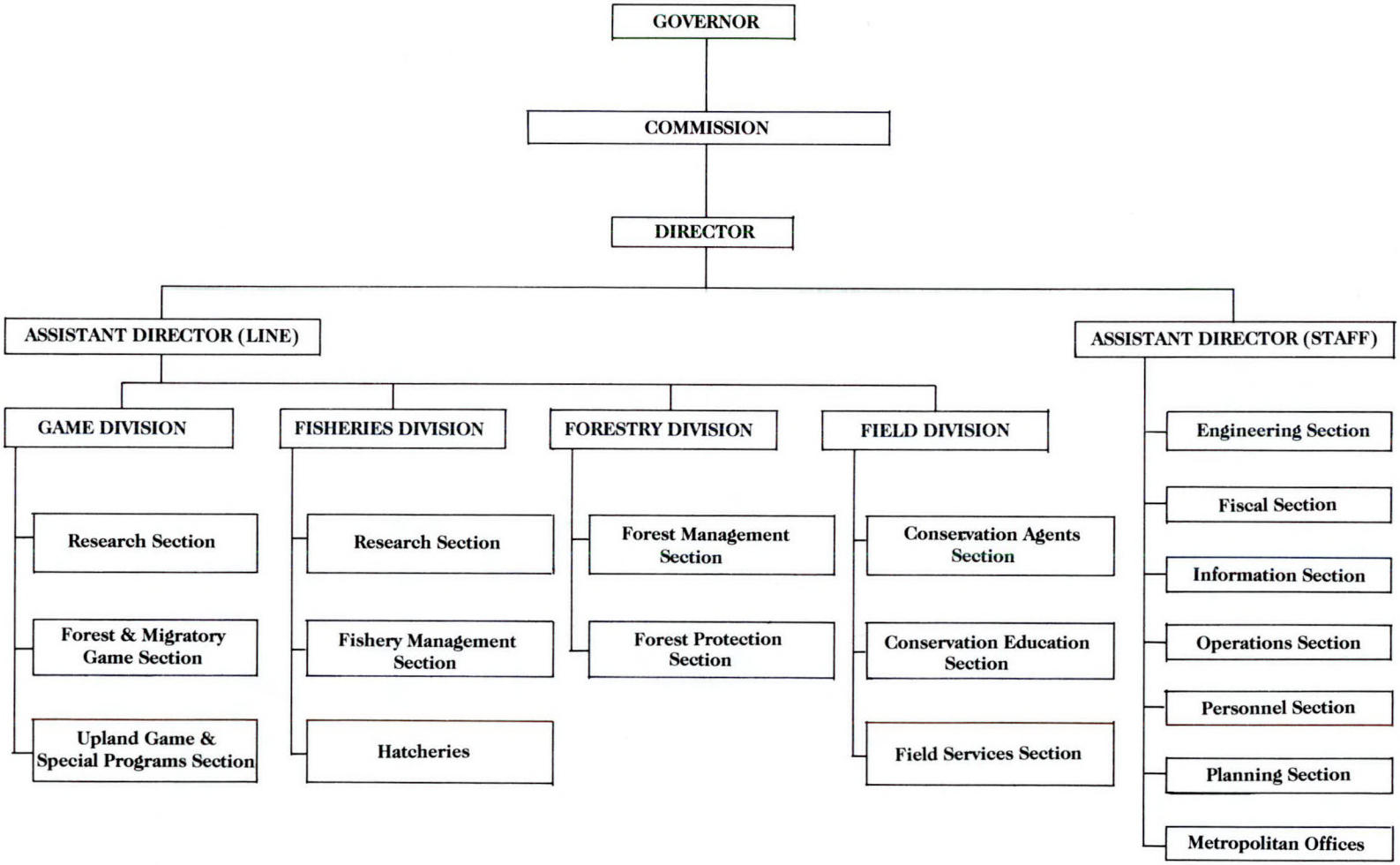
1946-1948


GOVERNOR
COMMISSION
DIRECTOR
FISH & GAME DIVISION
FORESTRY DIVISION
FIELD DIVISION
INFORMATION & EDUCATION DIVISION
Game Section
Fisheries Section
Development Section
FISCAL DIVISION
Permits Section
Business Section
Education Section
Information Section
Fire Control/ Tree Distribution Section
Timber Management Section
Protection Section
Field Service Section

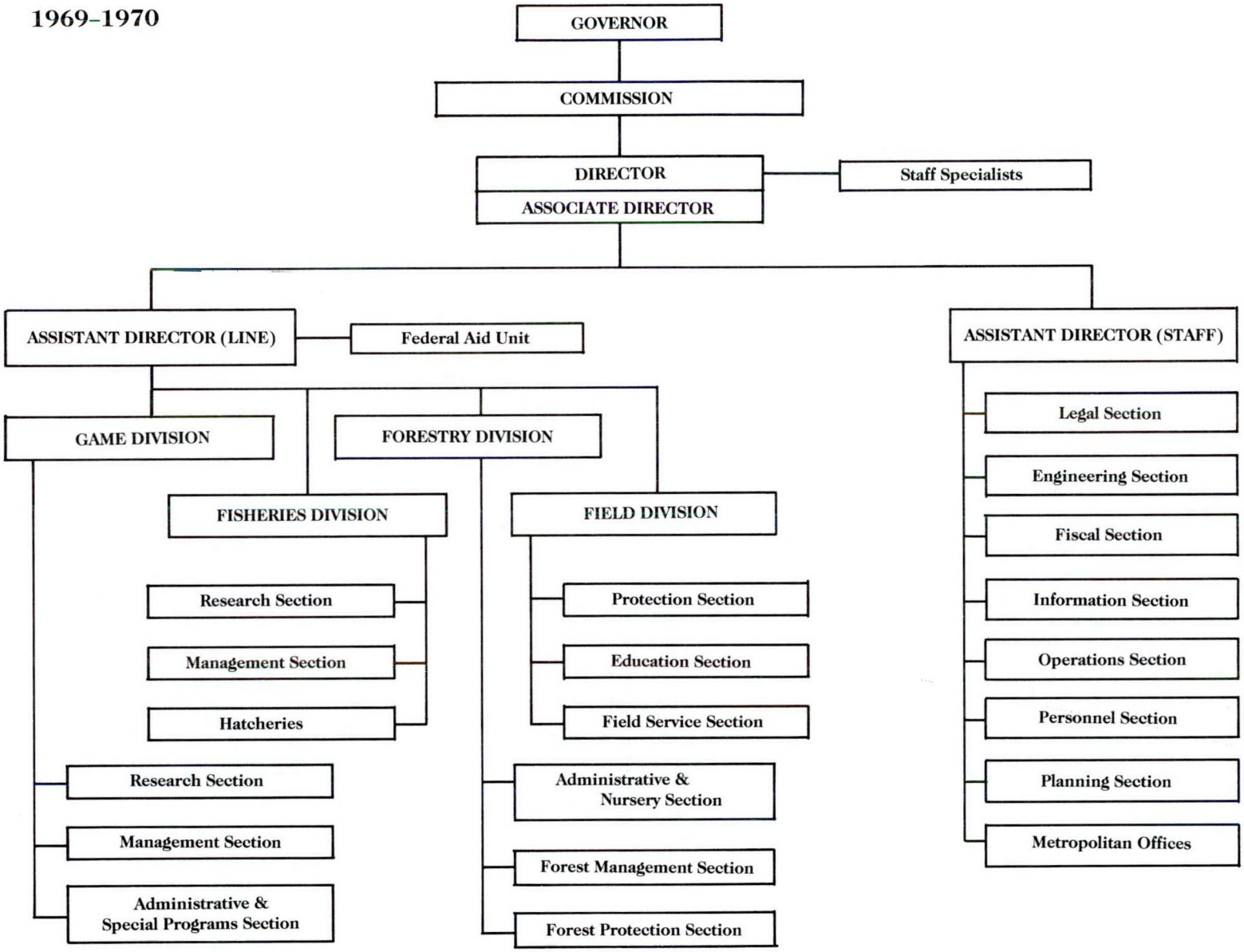
1961-1962


GOVERNOR
COMMISSION
DIRECTOR
ASSISTANT DIRECTOR
FISH & GAME DIVISION
FORESTRY DIVISION
FIELD ACTIVITIES DIVISION
Information Section
Fiscal Section
Personnel Section
Metro Offices
Chief Pilot
Game Section
Fisheries Section
Farm Forestry Section
Forest Fire Control Section
Construction & Maintenance Section
Protection Section
Education Section
Field Service Section

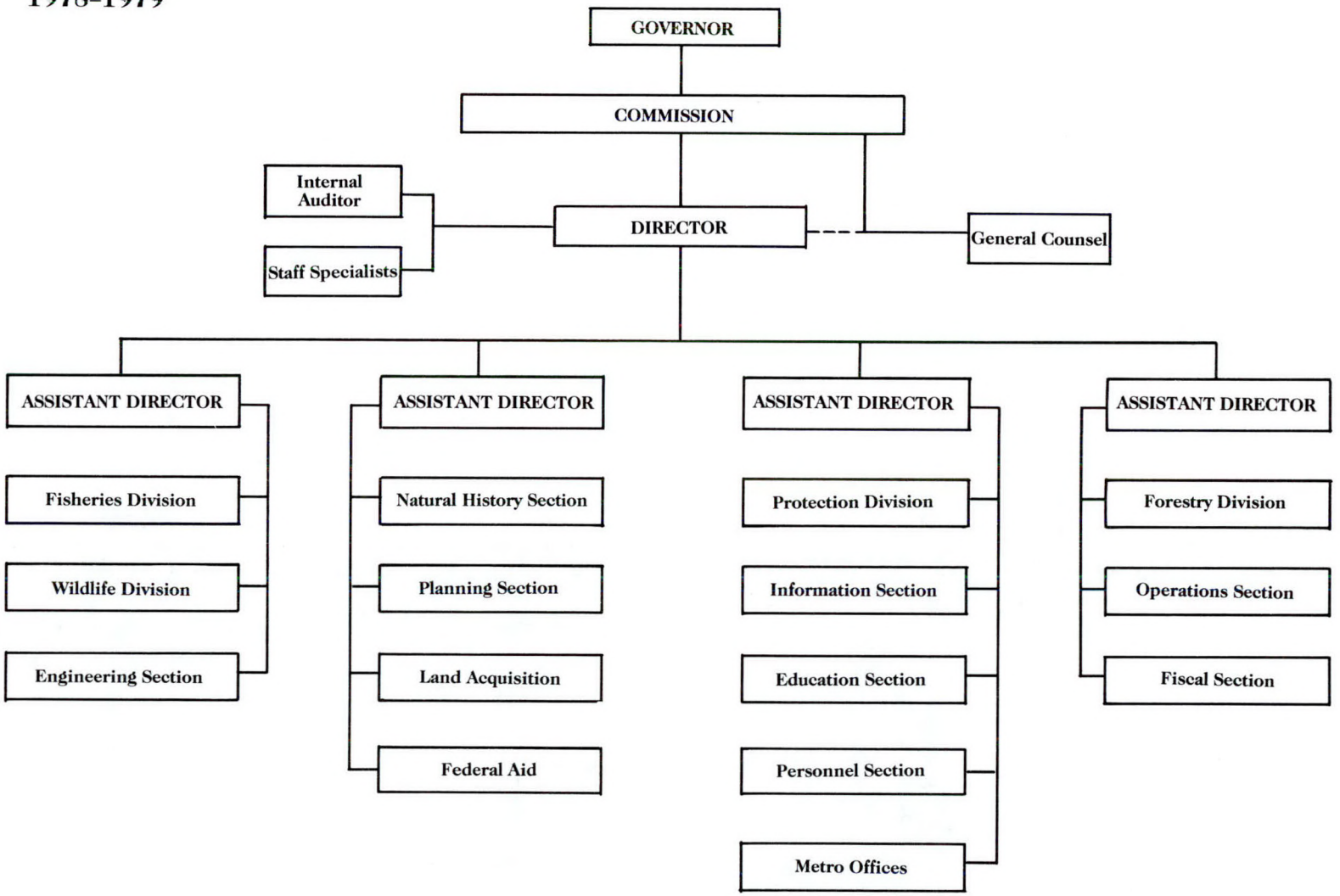
1965–1969


GOVERNOR
COMMISSION
DIRECTOR
ASSISTANT DIRECTOR (LINE)
ASSISTANT DIRECTOR (STAFF)
GAME DIVISION
FISHERIES DIVISION
FORESTRY DIVISION
FIELD DIVISION
Research Section
Forest & Migratory Game Section
Upland Game & Special Programs Section
Research Section
Fishery Management Section
Hatcheries
Forest Management Section
Forest Protection Section
Conservation Agents Section
Conservation Education Section
Field Services Section
Engineering Section
Fiscal Section
Information Section
Operations Section
Personnel Section
Planning Section
Metropolitan Offices

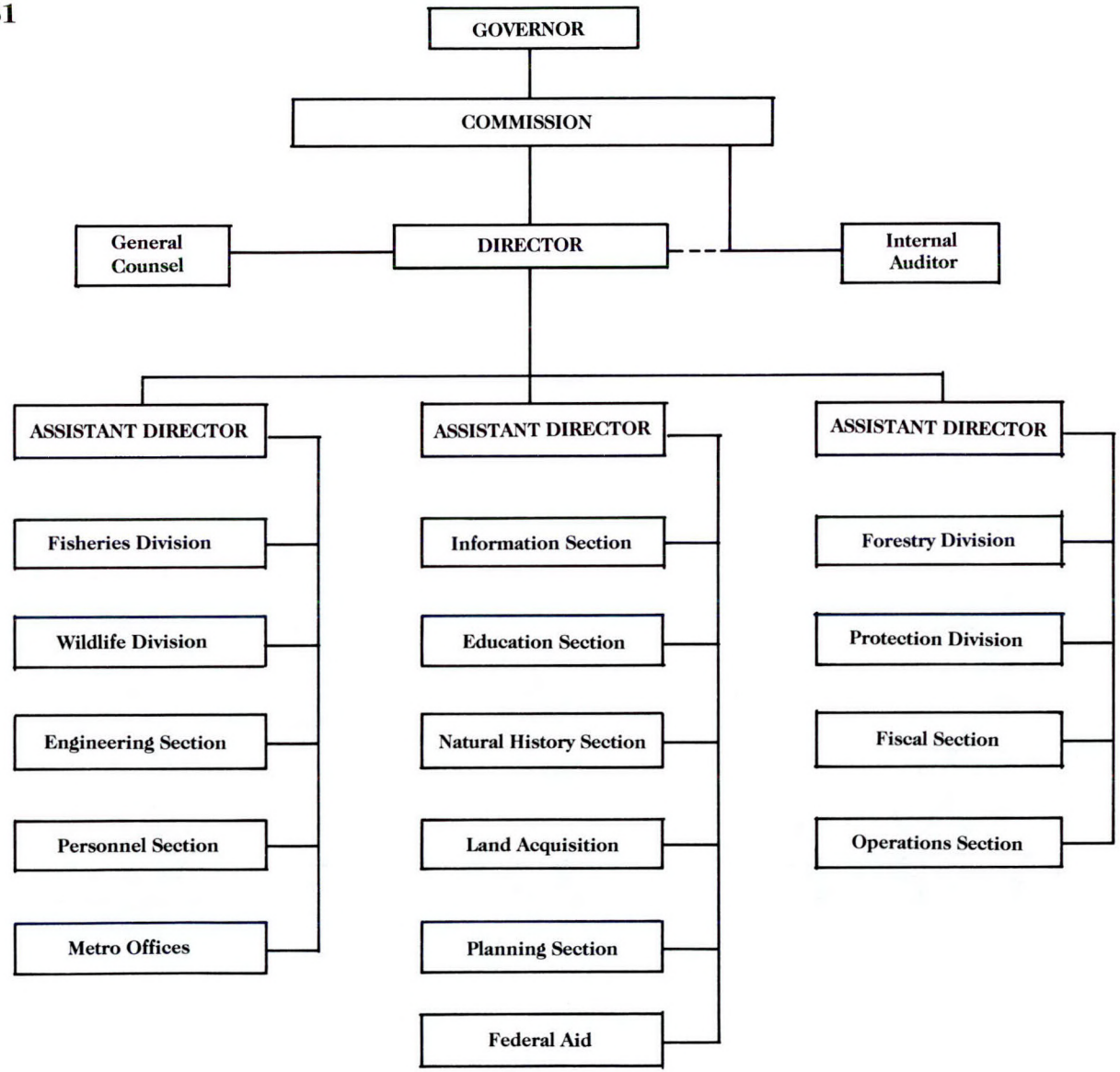
1969–1970


GOVERNOR
COMMISSION
DIRECTOR
ASSOCIATE DIRECTOR
Staff Specialists
ASSISTANT DIRECTOR (LINE)
Federal Aid Unit
ASSISTANT DIRECTOR (STAFF)
GAME DIVISION
FORESTRY DIVISION
FISHERIES DIVISION
FIELD DIVISION
Legal Section
Engineering Section
Fiscal Section
Information Section
Operations Section
Personnel Section
Planning Section
Metropolitan Offices
Research Section
Management Section
Hatcheries
Protection Section
Education Section
Field Service Section
Research Section
Management Section
Administrative & Special Programs Section
Administrative & Nursery Section
Forest Management Section
Forest Protection Section

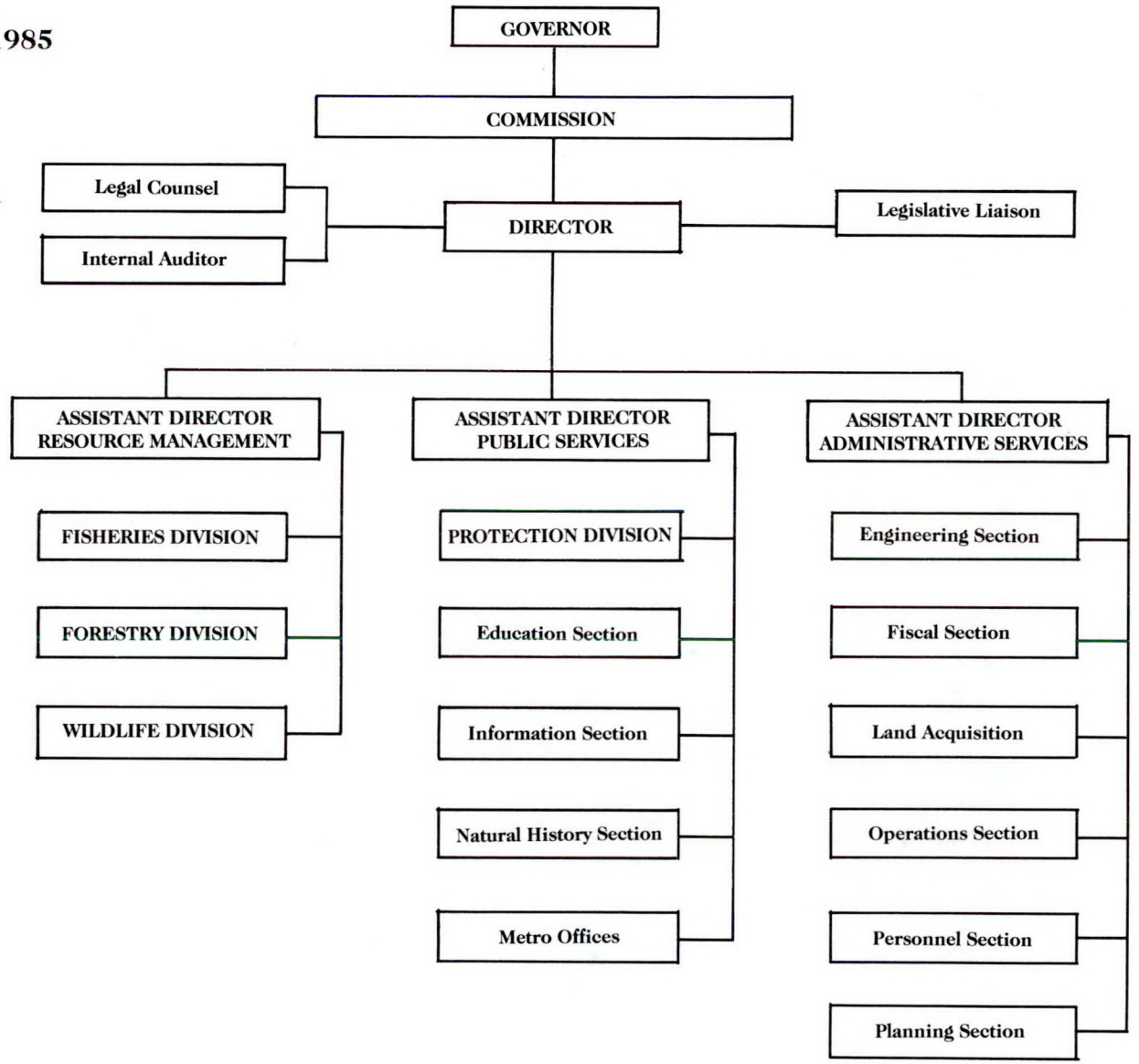
1978–1979


GOVERNOR
COMMISSION
Internal Auditor
Staff Specialists
DIRECTOR
General Counsel
ASSISTANT DIRECTOR
Fisheries Division
Wildlife Division
Engineering Section
ASSISTANT DIRECTOR
Natural History Section
Planning Section
Land Acquisition
Federal Aid
ASSISTANT DIRECTOR
Protection Division
Information Section
Education Section
Personnel Section
Metro Offices
ASSISTANT DIRECTOR
Forestry Division
Operations Section
Fiscal Section

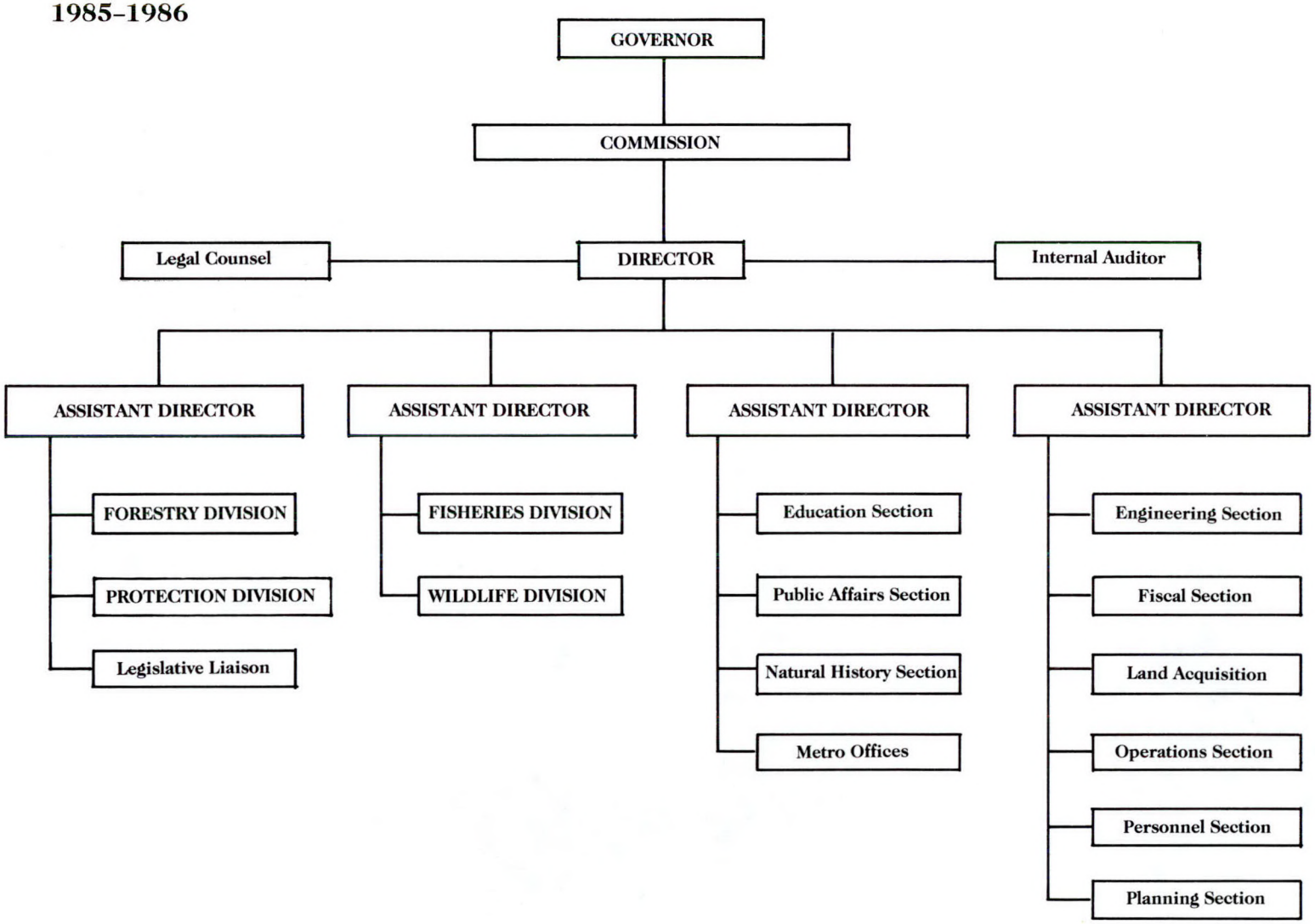
1980–1981


GOVERNOR
COMMISSION
General Counsel
DIRECTOR
Internal Auditor
ASSISTANT DIRECTOR
ASSISTANT DIRECTOR
ASSISTANT DIRECTOR
Fisheries Division
Wildlife Division
Engineering Section
Personnel Section
Metro Offices
Information Section
Education Section
Natural History Section
Land Acquisition
Planning Section
Federal Aid
Forestry Division
Protection Division
Fiscal Section
Operations Section

1984–1985


GOVERNOR
COMMISSION
Legal Counsel
Internal Auditor
DIRECTOR
Legislative Liaison
ASSISTANT DIRECTOR RESOURCE MANAGEMENT
ASSISTANT DIRECTOR PUBLIC SERVICES
ASSISTANT DIRECTOR ADMINISTRATIVE SERVICES
FISHERIES DIVISION
FORESTRY DIVISION
WILDLIFE DIVISION
PROTECTION DIVISION
Education Section
Information Section
Natural History Section
Metro Offices
Engineering Section
Fiscal Section
Land Acquisition
Operations Section
Personnel Section
Planning Section

1985–1986


GOVERNOR
COMMISSION
Legal Counsel
DIRECTOR
Internal Auditor
ASSISTANT DIRECTOR
ASSISTANT DIRECTOR
ASSISTANT DIRECTOR
ASSISTANT DIRECTOR
FORESTRY DIVISION
PROTECTION DIVISION
Legislative Liaison
FISHERIES DIVISION
WILDLIFE DIVISION
Education Section
Public Affairs Section
Natural History Section
Metro Offices
Engineering Section
Fiscal Section
Land Acquisition
Operations Section
Personnel Section
Planning Section

Commissioners



Albert P. Greensfelder *(R)*
St. Louis
1937–43



Wilbur C. Buford *(D)*
Ellington
1937–41



E. Sydney Stephens *(D)*
Columbia
1937–47



John F. Case *(R)*
Wright City
1937–39



Glen E. Stoner *(R)*
Springfield
1939–45



Owen G. Turnbull *(D)*
Troy
1941–47



Edward K. Love *(R)*
St. Louis
1943–49



Robert A. Brown *(R)*
St. Joseph
1945–51



Frank P. Briggs *(D)*
Macon
1947–61



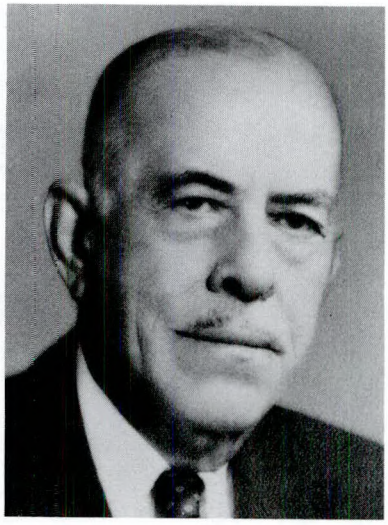
Dru L. Pippin *(D)*
Waynesville
1947–59
1961–64



Clifford W. Gaylord *(R)*
St. Louis
1949–52



Joe M. Roberts *(R)*
Gallatin
1951–58



Roscoe B. Clark *(R)*
St. Louis
1952–55



Ben Cash *(R)*
Kennett
1955–67



W.H. "Ted" Butler *(R)*
Bennett Spring
1958-63



Ewart H. Burch *(D)*
Maryville
1959-65



William R. Tweedie Sr. *(R)*
Jefferson City
1963-67



August A. Busch Jr. *(D)*
St. Louis
1964-65



Robert G. DeLaney *(D)*
Charleston
1965-74



Jim Tom Blair *(D)*
Creve Coeur
1965-77



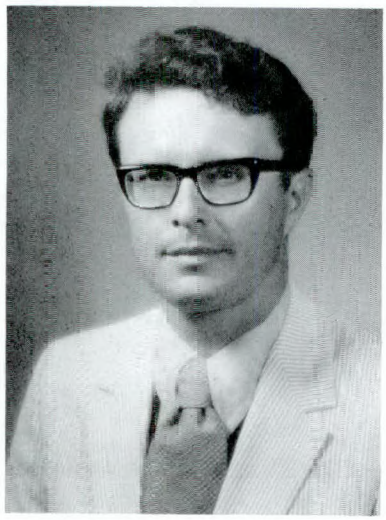
William A. Stark *(R)*
Bethany
1967–73



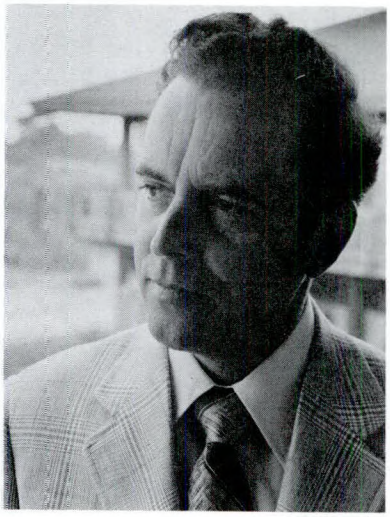
Lewis D. Linville *(R)*
Kansas City
1967–70



Harry Mills *(R)*
Clinton
1970–74



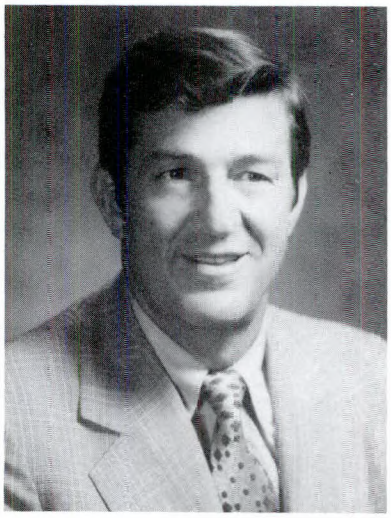
G. Andy Runge *(R)*
Mexico
1973–79



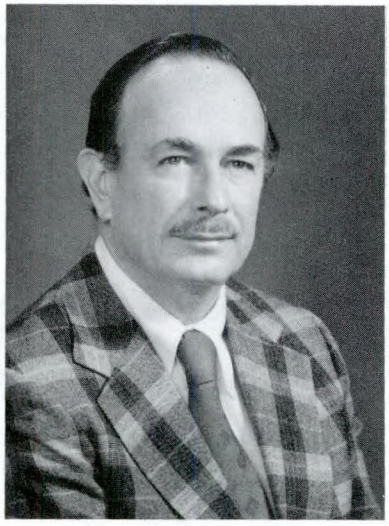
Gene Dement *(D)*
Sikeston
1974–(unconfirmed)



Robert E. Talbot *(R)*
Joplin
1974–(name withdrawn)
1975–79



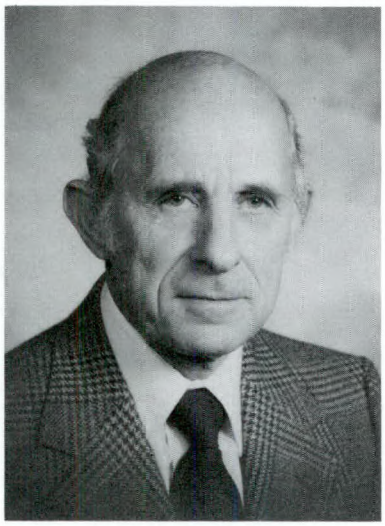
Robert Aylward *(D)*
Kansas City
1977–83



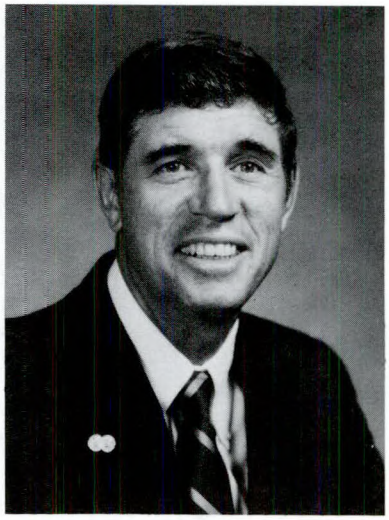
J. Ernest Dunn Jr. *(D)*
Kansas City
1977–83



Gordon F. "Jack" Waller *(R)*
Malden
1979–81



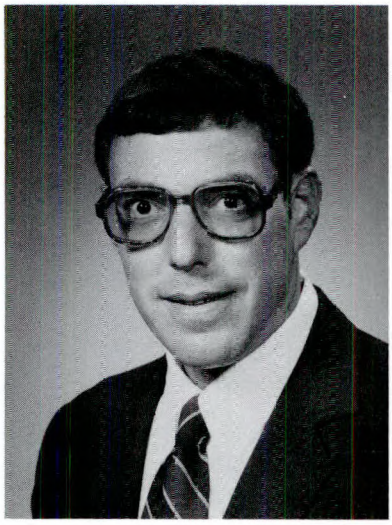
Carl DiSalvo *(R)*
St. Louis
1979–85



Peter Myers *(R)*
Matthews
1981–82



John B. Mahaffey *(R)*
Springfield
1982–



Jeffrey Churan *(D)*
Chillicothe
1983-



Richard T. Reed *(D)*
East Prairie
1983-



John Powell *(R)*
Rolla
1985-

Master Conservationists

The Master Conservationist award was adopted in 1941 and first presented in 1942. There were awards every year from 1942 until 1950 when there was a lapse of 18 years until R. A. Brown, member of the Conservation Commission from 1945 to 1951, was awarded the honor in 1968.

At the time of the Brown award, the Commission adopted as its policy for presenting the honor that it not be an annual event and that it be presented only when genuine merit demands recognition.

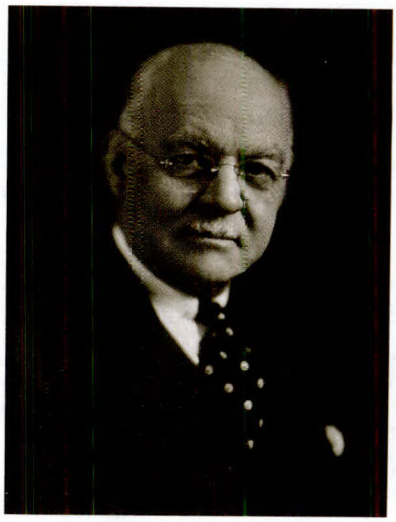
The following persons are Master Conservationists:



The Rev. George J. Hildner
Gildehaus
1942



Harry A. Plattner
Saline County
1942



Edward K. Love
St. Louis
1942



Eugene M. Poirot
Dudenville
1942



Dorris D. Brown
Warren County
1943



Morton Tuttle
Prairie Home
1943



James T. Montgomery
Sedalia
(posthumous)
1943

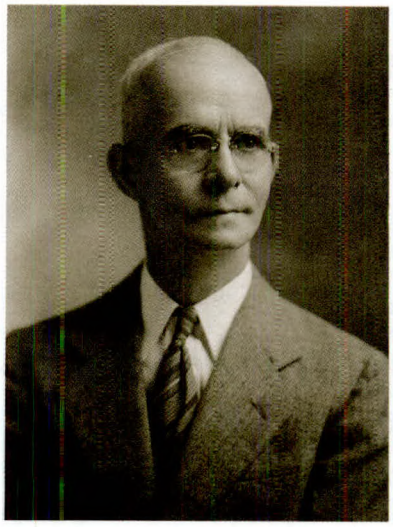


Roland M. Hoerr Sr.
St. Louis
1943

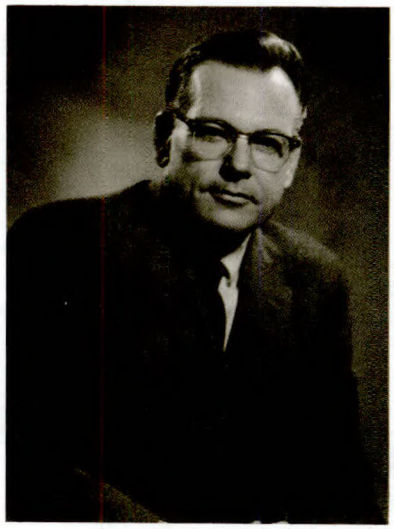


Eugene L. Hills
Cameron
1943

E. J. Evens
Amsterdam
(no photo available)
1943



Robert F. Redmond
Carthage
1944



Wayne Short
St. Louis
1944



Robert A. Langenbacher
St. Charles
1944



Allen McReynolds
Carthage
1945



W.H. "Ted" Butler
Springfield
1945



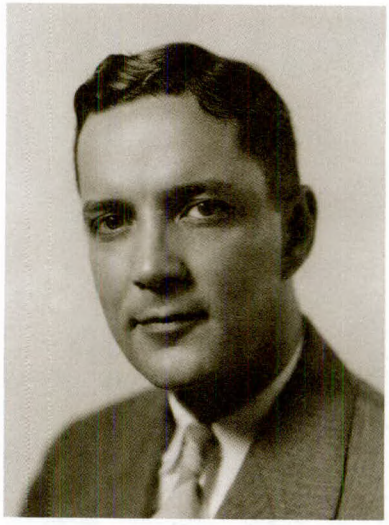
John F. Case
Savannah
1945



Maj. Gen. E. M. Stayton
Independence
1946



Chester C. Davis
St. Louis
1946



H. J. Waters
Columbia
1946



E. Sydney Stephens
Columbia
1947



James Stone
Neosho
1948



Mrs. Virginia Dunlap
Rivermines
1948



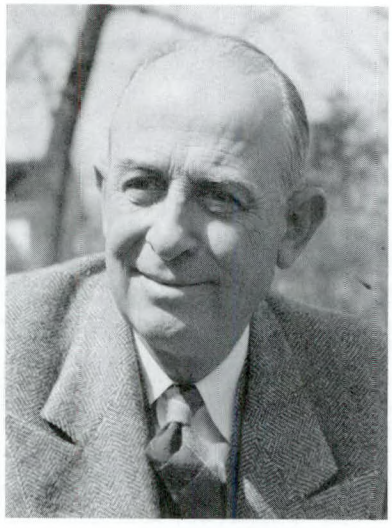
Leonard Hall
Caledonia
1948



Harry Hill
Joplin
1949



Charles C. Williford
Springfield
1949



Dean W. Davis
West Plains
1950



Ben H. Smith
Boonville
1950



R. A. Brown
St. Joseph
1968



Ted Scott
Buffalo
1973



Ed Stegner
Jefferson City
1977



R. Marlin Perkins
St. Louis
1982



Thomas S. Baskett
Columbia
1985

Charles W. Schwartz Murals

The story of conservation in Missouri is told pictorially by the murals of Charles W. Schwartz which grace the foyer of Department headquarters in Jefferson City.

The murals trace the history of the fish, forest and wildlife resources of the state from the pristine conditions of 1700 through the era of settlement and exploitation to the present conservation efforts.

The first two murals depict conditions here before the advent of white settlement; the hand of man is evident only in the small, mostly nomadic population of native Americans and their reliance on hunting and fishing.

Panel 1 illustrates the wildlife species associated with the forests that once covered thirty million acres of the state. The mountain lion was the largest of these, and has since virtually disappeared from the scene. Wild turkey, ruffed grouse, channel catfish, river otters and the bowfin fish caught by the otter were all present in abundance. The colorful Carolina parakeets in the lower right, once common in the river bottoms, are now extinct.

Panel 2 is devoted to the prairies that at presettlement times covered the western and northern third of the state. The Indian plucking a blue-winged teal is seated in front of a clump of native bluestem grass. The lifestyle of the Indian, the herds of buffalo and elk, and the prairie wolf present in the mural have all vanished from the state; only a few of the myriad shore, marsh and water birds remain today.

Panels 3 and 4 show the use and abuse of the state's natural resources by European settlers in the 1800s. Over half the state's forestland disappeared during the first century of statehood. Timber companies and their crews wielding cross-cut saws cut almost all of the native pine timber of the eastern Ozarks. The man hacking a tie from a log depicts how railroads gobbled timber for ties, then transported lumber to markets in the cities. What was left of the forests was "goated off," burned and grazed. The once-vast prairies disappeared beneath the plow.

Missourians at one time considered the fish and wildlife of the state an inexhaustible source of food and income. In Panel 4 a gigger has speared a bass, and a hunter aims at a doe with a fawn at her side. The passenger pigeons overhead and in the hand of the pioneer woman are now extinct. The wildlife hanging in the market and the large harvests of fish denote a time of exploitation, with little regard for the future and no concept of conservation.

The dawn of the era of conservation is depicted in Panel 5. A weathered placard urges a vote for Proposition 4, the constitutional amendment that created the non-political Department of Conservation in 1936. An old-timer running a trotline and a youngster hunting cottontails represent activities that would have faded from the scene without regulation and restoration by the Department.

Panel 6 shows the results of conservation efforts. Lookout towers were an important first step in halting the fires—many intentionally set—that destroyed thousands of acres of forestland each year. Halting wildfires and initiating restoration programs for white-tailed deer and wild turkey have improved timber as a market resource and a home for wildlife, and resulted in abundant populations of these game animals.

Scenes in Panel 7 depict wildlife management activities and wildlife protection by the Department. Schwartz says he painted the Canada geese nesting on the arctic tundra to show they, like the mallards in the center of the painting, are wildlife Missouri shares with other states and countries. The trout angler and trout stamp symbolize the many popular cold-water fisheries in the state, while the youngster with the bluegill denotes a simpler, more basic way to enjoy the state's fisheries resources.

Panel 8 concludes the mural series with reminders of progress the Department has made since the conservation sales tax was passed by Missouri voters and *Design for Conservation* was implemented. Funds unrelated to receipts of hunting and fishing permits made possible research on nongame resources such as bats, blind cavefish, crayfish and salamanders, and birds like the pileated woodpecker and great blue heron.

Schwartz began the mural series in 1965; the final four panels were completed after his retirement in 1981. A dedication of the completed series was held April 14 in the fiftieth anniversary year, 1987.

Pristine Missouri



1700





1800s



Exploitation

1930s



Restoration





Management



1976

A Chronology

Relative to Missouri Wildlife and Forests and the Department of Conservation

European man first began meeting Missouri and its wildlife about 1673, the year Marquette went down the Mississippi. In the ensuing years—between 1700 and 1870—man's views and attitudes toward wildlife shifted dramatically. Wildlife was a source of food, clothing and wealth, and it was also a nuisance—sometimes even an outright threat.

At first wildlife was merely part of the scene, something to be reckoned with. The frontiersman took wildlife as food or for clothing. He took it for its pelts, which could be traded for things he wanted to make his life a little easier or more pleasant. He tried to wipe it out when it invaded his crops, or competed with his livestock. It was a source of economic good—as pelts or meat for the market—or loss, expected to eventually pass from the scene.

Only gradually did the concept of preserving some wildlife come to be. Man's understanding of the factors that made for wildlife abundance or scarcity were only dimly perceived. Anyone who has read Theodore Roosevelt's books on ranching and hunting in the American West recognizes that even Teddy did not believe wildlife would persist much longer.

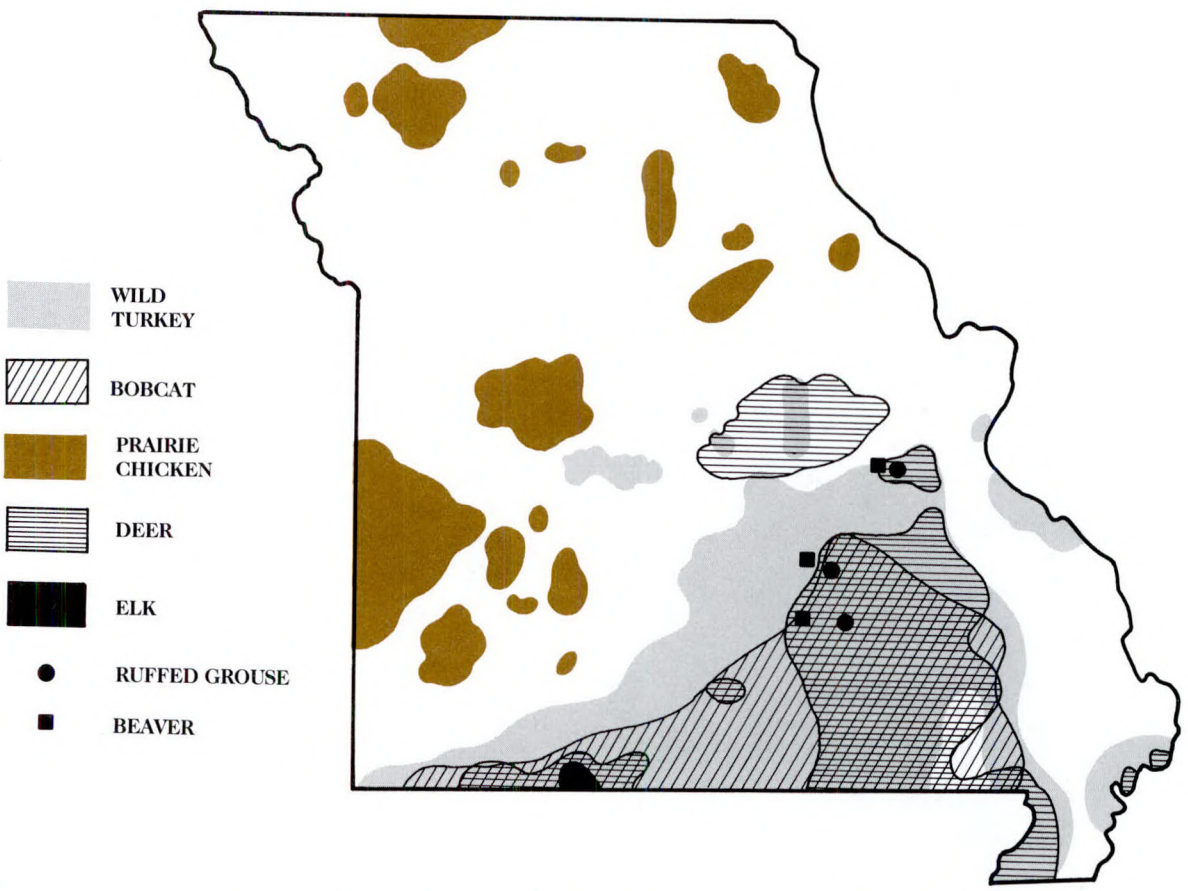
Yet, side-by-side with the concept of vanishing wildlife was the feeling of complacency that comes from abundance. No one seriously believed there would ever be an end to the passenger pigeon, whose flocks were so large as to darken the sun. The same was true of the buffalo, during the years when passengers on western trains, just for the fun of it, blazed away from the moving train cars into the inexhaustible herds of shaggy beasts that ran alongside the train.

The passenger pigeon disappeared from a combination of market hunting and the lumbering of their mast-producing forests. The bison almost went out of existence under the guns of the tongue and robe hunters. Both within a few short years.

But at the same time the passenger pigeon and bison were declining, the concept that wildlife didn't necessarily have to pass away before civilization—or at least its passing could be prolonged—was growing. It was the first stirrings of a conservation conscience.

Gradually, man began to make attempts to prolong the existence of wildlife that was there, and to restore its former abundance by stocking. The mechanisms that govern wildlife's presence were not yet understood. Thus we have the spectacle of dumping 100,000 California salmon into the Missouri River, or into farm ponds. It was the era when the European starling and the carp were introduced, along with a host of other wild creatures that either failed or became undesirable successes.

What follows is a short chronology of events indicating an awakening consciousness to the need of conservation leading ultimately to the formation in 1937 of the Conservation Commission and the State Department of Conservation.



A 1935 map by Aldo Leopold identified known ranges and migration routes of several wildlife species. Leopold estimated the woodcock, upland plover and introduced Mexican quail were "virtually extinct." Species that were on the decline were the the introduced English ringneck pheasant, raccoon, muskrat, prairie chicken, ruffed grouse and migratory waterfowl. Species once found in Missouri and their estimated time of disappearance, according to Leopold's map, were pronghorn antelope (1840), bison (1850), native elk (1900), peccary (1915), cougar (1927) and black bear (1927).

1816

First bounty laws levied on adult wolves and panthers—$2 within two miles of a settlement, bobcats 50 cents.

1818

Repealed bounty laws.

1824

First fire control laws; certificates in lieu of taxes offered as option for bounty.

1837

Statewide bounty law on wolves.

1840-42

State paid $7,629 in wolf bounties ($2/scalp).

1845

Wolf bounty law repealed.

1851

First game law (St. Louis County only) sets five-month season on deer, prairie chicken, turkey, ruffed grouse and quail; woodcock, seven months. Game species not to be sold in closed season.

1855

Statewide coyote and wolf bounty law passed.

1857

State law passed, applying only to Pike and Lincoln counties, that closed seasons for ruffed grouse, quail, prairie chicken, turkey, deer and woodcock. Repealed two years later.

1864

St. Louis County only, law passed protecting 17 species of insectivorous birds.

1865

"Sunday Laws" passed—no hunting.

1874

First statewide game laws set eight-month season on grouse and quail; turkey, six and one-half months; prairie chicken, woodcock, larks, six months; doves, five months; deer, three and one-half months. Cannot sell in closed season.

1877

Closures on raccoon, mink, otter, muskrat, beaver, seven months; turkey, six and one-half months; quail, eight and one-half months.

1878

State fish commissioner appointed; no salary.

Given $1,000 to stock streams of state; spent $487.

190,000 California salmon fry released.

Prairie chicken closed eight and one-half months.

1879

Non-residents forbidden to hunt.

Appointment of three fish commissioners authorized: Dr. J. G. W. Steedman of St. Louis, Col. John Reid of Lexington and Dr. Silas Woodson of St. Joseph.

$3,000 appropriated for Fish Commission. Not for salaries.

250,000 white shad fry, 100,000 California salmon, German carp, landlocked salmon, speckled trout, rainbow trout and tench released in various waters.

1880

200,000 to 300,000 carp fry released.

100 coturnix quail released by sportsmen near Jefferson City.

1881

First state-owned fish hatchery in St. Joseph opens; raises carp.

1883

$1,500 appropriated for first railroad fish car.

Hatchery established in Forest Park, St. Louis. Phil Kopplin was hatcheryman there, served 53 years.

1888

Quail closed nine months.

1889

Bucks-only deer season for first time. Four months open season, does protected until 1894. Prairie chicken open six months, woodcock five months, grouse three months.

1893

Quail and prairie chickens not to be sold.

1895

State Game and Fish warden office created, but no funds.

Jesse W. Henry, first Game and Fish warden, appointed.

Carp referred to by fish commissioner as "repulsive."

Deer and turkeys not to be sold.

1897

Three-months open season on deer.

1899

A. J. D. Burford appointed Game and Fish warden.

1901

Missouri becomes 23rd state to have an Audubon Society (St. Louis).

1903

John W. Revelle appointed Game and Fish warden.

$4,500 appropriated for a railroad fish car.

1905

Walmsley Law, first comprehensive fish and game law, established bag limits, set first hunting license fee of $1; 47,746 were sold. Non-resident fee of $15 set. Legislature appropriates $50,000 for Game and Fish warden J. A. Rodes and his department; there are 128 wardens, 53 of them paid, others part-time.

U. S. Forest Service formed.

1907

Walmsley Law repealed through efforts of market hunters.

James C. Bassford is new Game and Fish warden.

1909

Jesse A. Tolerton appointed Game and Fish commissioner.

All game and fish laws repealed, to be replaced by new law, financed by license sales. Sale of game is forbidden; grouse and prairie chicken completely closed, not to reopen on grouse until 1983; established other bag limits.

First game surveys requiring hunters to report daily game kill are unsuccessful due to lack of cooperation.

1910

First important distribution of game birds begun.

State game farm built at Jefferson City for pheasants and wood ducks. (It is believed that present Department headquarters is on the site of this old game farm.)

1911

First forestry course offered at Missouri University.

1913

Jesse B. Jones appointed Game and Fish commissioner.

Lake Taneycomo impounded.

1917

Tim Birmingham appointed Game and Fish commissioner.

Five percent of game and fish funds set aside for purchase of state parks.

1919

First fishing licenses issued: 9,000 sold.

Non-resident hunting license reduced from $15 to $8.

State Fish Commission abolished.[1]

1921

Frank Middleton appointed Game and Fish commissioner.

Forestry course at Missouri University discontinued.

1924

Frank H. Weilandy appointed Game and Fish commissioner.

Clarke-McNary Act passed; provides federal funds to help state forestry.

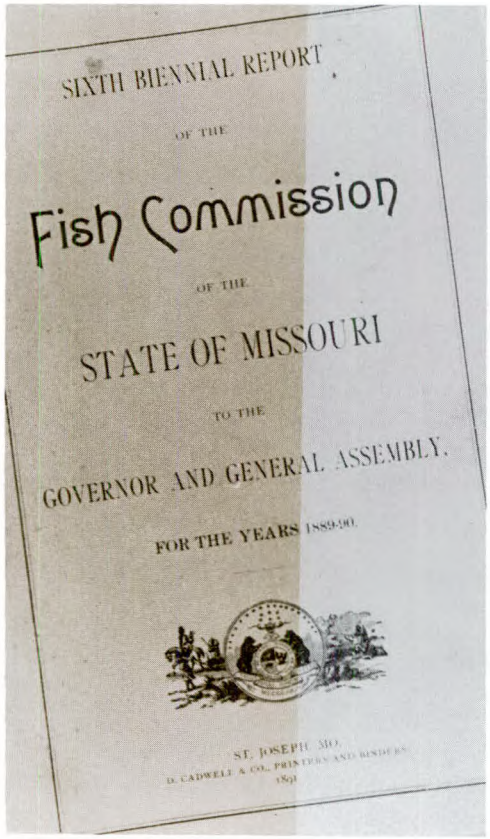
Round Spring (76 acres), Indian Trail (13,253 acres), Alley Spring (427 acres), Deer Run (6,160 acres), Mark Twain (100 acres) and Big Spring (4,576 acres) purchased by the state.

1925

Keith McCanse appointed Game and Fish commissioner.

25 percent of Game and Fish funds set aside for parks; there are now eight state parks.

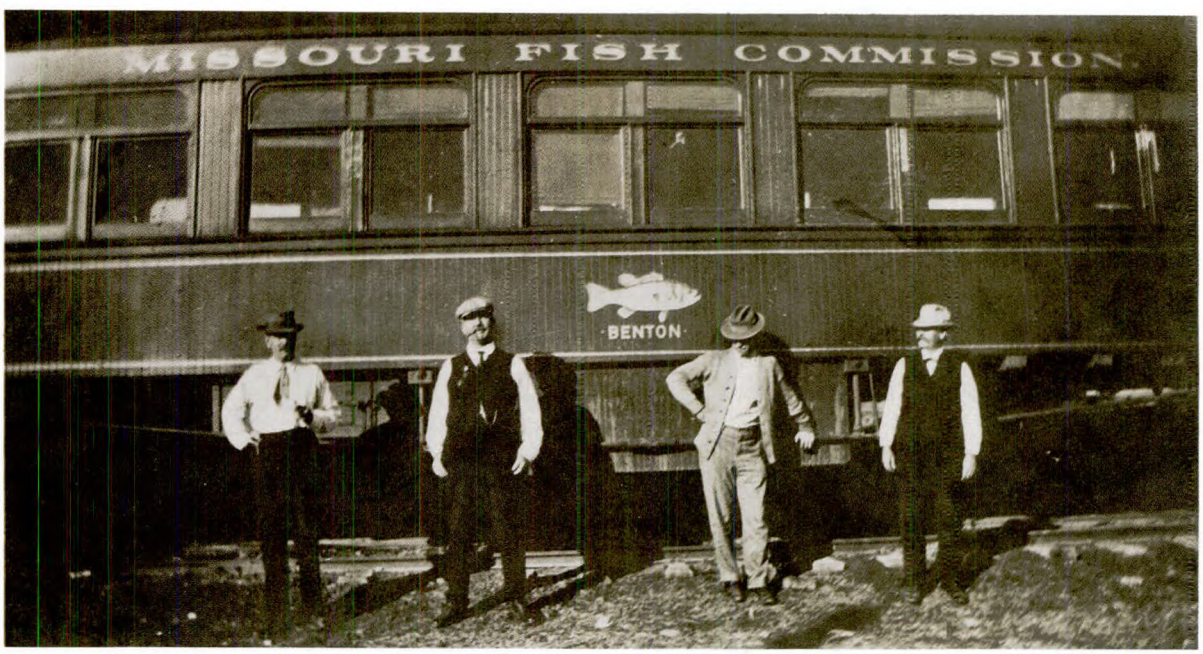
First shipment of 300 wild turkeys imported into Missouri.


SIXTH BIENNIAL REPORT
OF THE
Fish Commission
OF THE
STATE OF MISSOURI
TO THE
GOVERNOR AND GENERAL ASSEMBLY,
FOR THE YEARS 1889-90.
ST. JOSEPH, MO.
D. CADWELL & CO., PRINTERS AND BINDERS
1891

The Fish Commission tried to keep up with the growing demand for fish.



An early duck hunter and his bag.



"Benton," the railroad fish car, was utilized by the old Fish Commission to transport fish for stocking.



These 1910-era hunters found turkeys aplenty—and one opossum—on a Texas County hunting expedition. The photo was taken by V. E. Lynch, an early editor of "Fur, Fish and Game Magazine."

81539,2

No. 832 STATE OF MISSOURI $1.00

CITY RESIDENT HUNTING AND FISHING LICENSE

FOR CITY OF ST. LOUIS AND ST. LOUIS COUNTY

Mr. P A. Shepers of the City of St. Louis, Mo.,

whose street address is 7506 N. Broadway, and whose

age is 19 years, color eyes Blue, color hair Brown,

is hereby licensed to hunt and fish in said City and St. Louis County, until the first day of January after date hereof, subject to the restrictions and regulations of the Game and Fish Laws of Missouri.

Dated this 5th day of May 1921

Oliver J. Chapman
LICENSE COLLECTOR, CITY OF ST. LOUIS

P A Shepers
SIGNATURE OF HOLDER

BY _____ DEPUTY

HUGH STEPHENS JEFFERSON CITY A19:4

This unusual license was issued for use in the City of St. Louis or St. Louis County in the year 1921.

Turkey eggs purchased from North Dakota and Florida.
First shipment of 60 deer imported into Missouri from Michigan.
Deer season closed.
State forester post created in the Board of Agriculture; Frederick Dunlap is first state forester.
Fire protection district started at Deer Run State Park in Reynolds County.
Missouri Game and Fish News begins publication.

1926

Arrow Rock State Park (29 acres) purchased, also Meramec.

1927

Game and Fish Department outgrows two rooms in State Capitol and moves to 120 East High St.
Neal Walker is first director of public information for Game and Fish Department.
Warden force increased from 25 to 40.
Fish protected during spawning seasons, limits imposed.
Refuge system begun.
Farmers receive 24,000 English ring-necked pheasant eggs to raise for stocking.
Department imports 4,540 Mexican quail.
Sam A. Baker State Park (3,910 acres) purchased.
Montauk State Park (754 acres) purchased.

1928

News release started by Game and Fish Department.
First motion picture, *The Outdoor Life History of Missouri,* is completed.
First fishing condition reports begun.
Roaring River State Park (2,400 acres) donated by Dr. T. M. Sayman of St. Louis.

1929

Delph Simons appointed Game and Fish commissioner.
Warden force reduced to 30 men.
Townsend Godsey is director of publicity.
Department purchases 95 deer, 646 turkeys.
Dealers ship 15,000 live rabbits to New Jersey.
First non-resident $1/trip fishing license authorized.

1930

John H. Ross appointed Game and Fish commissioner.
Game and Fish News publication suspended.
State receives 100,000 brown trout eggs from Wisconsin.
First major use of radio (WOS, now KWOS, Jefferson City) for department programs.

1931

Effects of the Great Depression are felt, drop in license revenues.
Legislature does not appropriate forestry funds and State Forester Fred Dunlap resigns.
Three-day deer season for bucks with four points; 52 deer taken.
Wallace B. Grange of U. S. Biological Survey studies pheasant situation in Missouri: since 1904, approximately 15,107 adult pheasants and 80,000 pheasant eggs have been distributed in Missouri, without results. Grange urges stocking be discontinued.
Bagnell Dam closed and Lake of the Ozarks impounded.
There are now seven state-owned hatcheries, three leased hatcheries and nineteen auxiliary hatcheries.
Ten tons of turtles removed from Lake Taneycomo.
Fish and Game Department had three motion pictures on state parks, released new one entitled *Lake of the Ozarks.*
House organ, "Fish and Game Department Bulletin" begun.
One hundred anglers opened trout season at Montauk, 465 at Bennett Spring.
Aldo Leopold includes Missouri in game survey of North Central states.

1932

W. C. Buford appointed Game and Fish commissioner.
Continued decline in revenue as Depression deepened.
Enforcement hampered as courts refuse to prosecute poor people securing game and fish for food.
Roaring River State Park opens to trout fishing.
Acquired Big Lake, Wallace, Washington and Van Meter state parks.
Power dams proposed for Current, White, Osage, Black, Gasconade rivers.
Course in wildlife conservation begun at Missouri University by Rudolf Bennitt; three students enrolled.
Bennitt compiles a checklist of birds, the first since Otto Widman's list of 1904.

Supreme Court says counties may adopt closed quail season; six counties do so, Harrison, Johnson, Daviess, Cass, Andrew and Atchison.

Purchased 600 semi-wild turkeys from B. K. Leach for release at Meramec, Indian Trail, Deer Run and Sam Baker; purchased 1,000 Virginia quail brood stock at $5.50/pair.

1933

Wilbur C. Buford, director of Game and Fish, announces "complete turnover of personnel" in first year.

Revenue declined for third straight year, but Depression programs under National Park Service, Civilian Conservation Corps and U. S. Forest Service offset this to some extent.

1934

Survey of Resident Game and Furbearers by Dr. Rudolf Bennitt and Werner O. Nagel begun.

1935

Restoration and Conservation Federation of Missouri established September 10 at Columbia. E. Sydney Stephens of Columbia president. Organization embarks on petition drive to establish non-political fish, wildlife and forestry administration.

Cooperative Wildlife Research Units established nationally. (Missouri's established 1938).

Missouri Game Research Area and Arboretum (2,336 acres) begun at Ashland.

1935-36

Winter of 1935-36 record snow and cold, 60 tons of feed put out for wildlife.

1936

Forestry Department created within the College of Agriculture, University of Missouri.

Bennitt and Nagel complete resident game and furbearer survey.

Agricultural Extension Service at Missouri University issues *Ponds for Missouri*, a circular urging ponds for livestock and wildlife.

Wildlife Building at Missouri University dedicated.

On June 1 there were 12,857 men enrolled in the Civilian Conservation Corps.

In August the new wildlife pavilion opened at the State Fair, built by the WPA.

Petition drive for Amendment 4, creating the non-political Conservation Commission, begun by Conservation Federation of Missouri. Passed by voters on November 3, 879,213 for to 351,962 against.

1937

January 1, State owns 23 state parks and two quail farms.

April 1, Bennitt and Nagel *Survey* published by University of Missouri.

Author's note: Various positions and units within the Department have had different names over the years. All biologists, information personnel and foresters were once called "technicians." What we now call Protection "regions" were formerly called "districts." In the early days both employees and the public referred to the Department of Conservation as "the Commission." In fact, the Department of Conservation was a separate legal entity. Not until 1974 did the present Department actually become the State Department of Conservation. I have chosen to use modern terminology in most cases. The following summaries are based on the minutes of the Commission meetings for the past 50 years.

July 2, Governor's office: The first Conservation Commission meeting. Supreme Court Judge George Robb Ellison swears in commissioners.

E. Sydney Stephens is elected chairman with A. P. Greensfelder vice-chairman, Wilbur C. Buford secretary, and John F. Case member. (Stephens would be re-elected chairman for ten years.)

J. Frank Ramsey is named acting director.

All Game and Fish Department personnel are retained for the present.

August 13, Jefferson City: Commission asks for an audit of funds.

Sets aside $6,000 as Department contribution to the proposed wildlife research unit at Missouri University.

Adopts game bird release program suggested by Rudolf Bennitt, with W. O. Nagel as part-time supervisor.

Authorizes Acting Director Ramsey to spend up to $400 for a State Fair exhibit.

Adopts resolution to utilize federal aid to wildlife funds (Pittman-Robertson).



The old Game and Fish Department built this exhibits building for the State Fair in the 1920s. In 1934 the WPA built the pavilion that, with modifications, is still in use.



Members of the old Fish and Game Department circa 1927, with Department Chief Keith McCanse fifth from right, standing.



Sign used during the McKanse administration (1925–1929) showed that hunting and fishing license revenues purchased the state parks. Many sportsmen objected to this and it became a rallying point for passage of Amendment 4.



An advertisement that ran November 2, 1936 in the St. Louis Post-Dispatch *urged voters to enact Amendment 4, "proposed by the people themselves."*

September 13, Jefferson City: Audit shows balance of $15,423.97; bills total $17,769.59.
Acting Director Ramsey to prepare five-year plan for use of Clarke-McNary funds for state forestry.
Commission hires Harold V. Terrill, first biologist, at $125/month.
Defines "public waters" for fish stocking.

September 25, St. Louis: Commission met at the Missouri Athletic Club with national conservation leaders to discuss director qualifications and program ideas.
Adopts five major functions or activities: research, propagation, enforcement, forestry and public relations.
Considers Peter Hoffmaster, Leslie Bean, Irwin T. Bode and Paul V. Brown for post of director.

November 15, Jefferson City: Irwin T. Bode employed as director, with J. Frank Ramsey as assistant director.
Stephens suggests creating divisions of Enforcement, Forestry (see 1944), Public Relations, and Game and Fish Management; research to be delegated to Missouri University.
Stephens suggests Bode draw up a table of organization.

December 28, St. Louis: Missouri Athletic Club.
Commission earmarks 15 percent of income for forestry.
Director Bode to look into developing criteria for hiring agents.
First test case, suit brought by J. T. Blair to oust Bode for not being a Missouri resident.

1938

January 17, Jefferson City: Commission claims fines and devotes revenue to wildlife management education. (Was later disallowed.)
Biologist Harold V. Terrill assigned to Game Management Division.
Dr. George B. Herndon continued as chief of hatcheries.
Montie Glover continued as chief clerk.
Bruce Lewis named refuge inspector.
Bettye Hornbuckle continued as secretary to director.

February 25, Supreme Court rules in Bode's favor, against ouster.

February 28, Jefferson City: Commission receives 751 applications for agent jobs. W. C. Shaffer of Pennsylvania establishes hiring procedures for agents.
Budget of $295,000 presented.
Townsend Godsey named information officer.

March 14, Jefferson City: George O. White hired as state forester.
Arthur L. Clark hired to head Game, Fish and Forestry Division.
Commission agrees to buy Rockwoods Reservation.

April 11, Jefferson City: Commission approves publishing of *Missouri Conservationist.*
Passes regulation opening bass season earlier than statutes.

May 28, Byron Marsh arrested for fishing for bass in closed season (test case).

June 7, Jefferson City: Commission buys 500 turkeys at $14 each and accepts gift of 500 turkeys from B. K. Leach for stocking.
Orders Bode to appoint a committee to study dam proposals and draw up Commission policy.
Orders 25 cents per person per day to trout fish in Bennett Spring and Roaring River state parks.
Establishes an agent hiring list based on examinations and interviews. Hires 35 agents and four supervisors. Names them "conservation agents," not wardens. Agents to be given two weeks training.
Commission establishes four field districts or regions.
Hires Wallace Gray as field service agent.

June 9, Justice of the Peace finds Marsh guilty. Case referred to Supreme Court.

June 27, Jefferson City: Rockwoods Reservation becomes Department property by partial purchase.
Thirty-five men selected as conservation agents, based on examination process. Regional supervisors are Joe Green, Centralia; W. G. Noble, Springfield; J. Vernon Bennett, Fredericktown and Cave Johnson, Cameron. Among the agents were Robert Worthington, Edgar Allen, M. K. Chapman, George Laun, Fred E. Bickel, James D. Beets Jr., Kenneth R. Hicks, J. L. Berrey—all destined to hold higher positions in the Department.

Four foresters hired: William E. Towell, Arthur B. Meyer, August H. Schmidt, Edward J. Seay.
J. Frank Ramsey resigns to become prison warden.

July 1, First *Conservationist* published, 10,000 copies; second edition had 11,085 subscribers.

July 11, Jefferson City, Senate Lounge: The Commission meets with 26-member Advisory Board appointed by the governor at time of Commission's formation. Gov. Stark suggested that after one year the Advisory Board should discuss its activities with Commission. Stephens and Bode presented what had been accomplished by the Department to date.

July 11, Jefferson City: Director authorized to select badge design for agents.

August 23, Sedalia, Wildlife Pavilion: Commission hires Asbury Roberts as chief of Protection.
Authorizes hiring of first two towermen, at Sam Baker and Big Spring.
Adopts badge design as official insignia of the Commission, orders it copyrighted.
Accepts DuPont Reservation (1,118 acres) in Pike County.
Adopts memorial of gratitude to Edward K. Love for fiscal assistance.

September 26, Jefferson City: Commission adopts title "wildlife conservation agents." "Wildlife" was added to avoid confusion with Soil Conservation Service agents.
Declares county option of closing quail season null and void.
Declares wildlife statutes are rules of the Commission, until they adopt other regulations.
Sets up an agents' training course, Oct. 9-22, at Camp Hawthorn on Lake of the Ozarks.
Closes deer season and turkey season.
Approves rental of third floor of Monroe Building for office space.

November 4, Supreme Court finds Marsh not guilty. Decision confirms Commission's right to establish wildlife regulations, abolishes any laws in conflict therewith.

November 14, Jefferson City: Commission hires biologists Arthur Hugh Denney, Allen Reed Twichell (Nov. 15) and Lisle Jeffry (Dec. 1).
Establishes Cooperative Wildlife Management Program on private lands.
Employs Charles Kirk as forester, effective Nov. 1. Transfers Field Service Agent Wallace Gray from Information and Field Service Division to Game, Fish and Forestry Division. W. G. Noble resigns as regional supervisor and Robert Worthington appointed in his place.
Decides to ask legislature for funds for forestry work.
Authorizes a 25¢/year charge for the *Conservationist.*
Start of Pittman-Robertson federal aid to wildlife program.

December 19, Jefferson City: Commission approves Nature Knights program.
Begins cooperative Korean lespedeza distribution program.
Approves 1939 budget of $432,013.
Adopts official uniform for agents.
Officially approves Pittman-Robertson program in Missouri.

1937-38 Summary: Cooperative Wildlife Management Areas begun; 1,200 farmers cooperate.
Farm pond program begun.
Director I. T. Bode hired, legal contests settled.
Supreme Court rules Commission has power to establish regulations.
Cardareva State Forest, Rockwoods Reservation acquired.
DuPont Company gives Department tract in Pike County.
State Park Board formed; consists of governor, attorney general and director of Department of Conservation. Park lands divided between new Park Board and Conservation, based on primary use.
Pittman-Robertson Federal Aid to Wildlife adopted.
Agents selected on merit, four protection districts formed, 35 agents and four field supervisors.
Five forest fire control districts formed.
Missouri Conservationist issued July 1, 1938.
First "Showboat" launched.
Soil surveys show links between wildlife and soil.

1939

January 16, St. Louis, Missouri Athletic Club: Mr. Case opposed to hiring married ladies. Department did so anyway.
Riley Gladden hired as agent.

February 3, Jefferson City: Paul G. Brooks hired as fire towerman.

March 27, J. Frank Ramsey, former acting and assistant director, dies of heart attack.

March 31, Columbia, Tiger Hotel: Walt Disney given appreciation for Nature Knights pledge card design.
Love Foundation donates $1,000/year toward hiring fisheries biologist.

May 22, Jefferson City: Commission hires A. Starker Leopold for turkey research.
Authorizes printing of a bulletin on Missouri trees.

June 6, St. Louis, Chase Hotel: Stephens absent.
Commission adopts policy on dams in Missouri.
Authorizes a field uniform for Forestry Division.

August 16, Jefferson City: Commission hires first fisheries biologist, Albert E. Weyer, and assigns him to Lake of the Ozarks.
Dillard M. Branson and Leonard Rowe hired as agents.

October 2, Jefferson City: Glen Stoner of Springfield replaces Case as commissioner.
Commission hires second fisheries biologist, Dr. W. C. Frohne.
Hires Paul G. Barnickol as fisheries biologist on temporary basis.
Okays test removal of rough fish from Sunshine Lake by a commercial fisherman.
Hires a second field service agent, Cecil Veatch.
Adopts new *Wildlife Code*, effective 1940.

December 11, Jefferson City: Commission adopts a fisheries program of hatcheries, salvage, rough fish control, field surveys and Lake Ozarks management.
Creates farm forestry positions.
Okays plan to conduct at least one public meeting in each county to explain new *Wildlife Code.*

1940

January 8, Jefferson City: Commission approves study of Meramec Basin resources.
First teachers' manual issued.
Radio programs sent to stations.
Biologist Edgar Biffle hired.

February 5, St. Louis: Arthur Meyer transferred from district forester to newly-created farm forester position.
Jay B. Morrow hired as field service agent.

February 15, Jefferson City: Caney Mountain approved as turkey refuge.
Conservation Federation opposes dams.

March 4, Jefferson City: Commission hires Faith Watkins, first professional female employee, assigned to youth and women's programs.
Approves production of first motion picture, *Back to Missouri.*

June 2-3, St. Joseph: First reciprocal agreement with Illinois to honor permits.

July 1, Hannibal: Commission hires more biologists: Charles W. Schwartz, Carl R. Noren, Webster Kim Clark, Willard Barbee, David L. Spencer. Paul Q. Tulenko hired as draftsman/statistician.

August 12, Cape Girardeau: Commission receives first Pittman-Robertson funds—$55,692.42.
Purchases first towersite, Kelleter Tower, Washington County. (Named to honor mother of USFS Supervisor, Paul Kelleter).

November 5, McCawley Repealer, attempt to do away with Commission, failed at polls 2 to 1.

1939-1940 Summary: Stream and lake surveys, Korean lespedeza distribution and Nature Knights program begun.
Closed seasons on deer and turkey.
Budget of $674,000 approved.
Caney Mountain Refuge acquired.
Inaugurated refuge system for all game.

1941

January 6, Jefferson City: Commission receives 1,300 applications for conservation agent.
Protection given divisional status.
Land and Waters Section re-named Engineering and Acquisition Section.

February 15, 17, 20, Jefferson City: Commission adopts policy on naming Department areas; names will be based on geographical features and/or historical characters, and must be approved by Commission.

March 15, Jefferson City: Commission hires Aubrey R. Hammett Jr. as legal counsel.

April 12, Jefferson City: Commission adopts fish stocking policy; will stock private waters only where owner permits free fishing.

May 3, Kansas City: Commission hires Biologist Bill T. Crawford on a temporary basis.
Biologist Werner O. Nagel hired.

June 7, Houston: Commission establishes an Education Section separate from Information; hires Forrest Olin Capps and Everett Evans as Education chief and assistant.
Abolishes agents collecting fees on arrests.
Hires Lee C. Fine as forester.
Townsend Godsey resigns.
Harold W. Clover hired as Information chief.
Charles H. Callison hired as Information assistant.

July 15, Jefferson City: Commission authorizes director to order permits for 1942 because of possible paper shortage, also to lay in a stock of tires.
Hires Biologist Dunbar Robb.
Hires James L. Bailey as conservation agent.
Establishes 12,500-acre deer and turkey refuge on Stoner lands in Texas County.

August 9, St. Louis: First set of conservation teachers' manuals approved.

September 27, St. Louis: Commission establishes Master Conservationist Awards.
Agents designated official representatives of the Commission in their districts.

December 8, Jefferson City: Consideration of budget suspended so Commission could listen to President Roosevelt's radio address on Pearl Harbor attack; included in minutes of meeting.
Budget of $715,000 approved.

1942

January 10, Jefferson City: Commission reappoints Bode director for four more years.
Edwin A. Mayes named chief of Engineering, Acquisition and Construction Section.
Montie Glover named chief of Budgets and Accounts Section.

February 9, Jefferson City: *Conservationist* circulation at 7,500 (25¢ subscription rate dropped.)

March 7, St. Louis: Commission sets up two quail study areas to test stocking; quail stocking to end in five years.
Agent Dorris Frazier named supervisory assistant in Education Section.
Commission agrees to stock 500 of B. K. Leach's semi-wild turkeys in 1942–1943.

April 25–26, St. Louis: Stephens reappointed; Owen Turnbull appointed to replace Buford as commissioner.
Commission approves siren to open trout fishing in parks.
Fire towers declared off-limits to public so saboteurs cannot use them for signaling.
Bill T. Crawford hired as full-time biologist.
Herschel P. Bledsoe hired as towerman.

May 16, Jefferson City: Commission calls in four field service agents, six district supervisors, Protection Chief Roberts and Fish and Game Chief Clark to ask opinions about public perceptions of Department progress. General feeling is that public is favorable, wildlife is increasing and Department is given credit.
Hires Paul G. Brooks as agent.

June 20–21, Poplar Bluff: Commission demotes Edwin Mayes, promotes William M. Hill to chief of Engineering, Acquisition and Construction Section.
Agents report difficulties patrolling due to war shortages of gasoline and tires.
Commission approves $2.50/month extra for agents using horses on patrol.
Robert F. Wells hired in Forestry as construction superintendent.
Ellen Markward hired as education assistant, second professional female.

July 25, Jefferson City: Commission adopts official insignia (hawthorn blossom) required to be worn by field personnel.
Fifth anniversary of Cooperative Research Unit at Missouri University.

August 24, Springfield: Harold Clover in armed services, Commission names Charles H. Callison acting Information officer.
Hires Rex Gary Schmidt as photographer.
Relaxes agent hiring requirements due to manpower shortage.

September 20, Jefferson City: Commission presents first Master Conservationist Awards in



Agent John Reed models the 1939 agents' uniform, which many thought resembled a Gestapo uniform. Colors were indigo blue with metal buttons and olive drab trim.



Arthur Clark, left, and Hugh Denney, right, converse in a 1940 photo.



I. T. Bode at Deer Run Refuge in 1949.



A 1939 or '40 Commission meeting in the High Street office shows a framed Disney Nature Knight certificate on the wall. Seated around the table are I. T. Bode, G. E. Stoner, A. P. Greensfelder, Wilbur Buford and E. Sydney Stephens.



The farm pond program was in full swing in 1945, and pine plantings were recommended to enhance habitat around the pond.

wildlife pavilion at State Fair to Rev. George J. Hildner of Villa Ridge, Edward K. Love of St. Louis, Harry A. Plattner of Saline County and Eugene M. Poirot of Dudenville.
Hires Aden C. Bauman as fisheries biologist.
Fisheries biologists W. C. Frohne and Albert E. Weyer left Department for war work with U. S. Public Health Service.
George O. White appointed State Coordinator, Forest Fire Fighters Service, Office of Civilian Defense.

October 21, Jefferson City: Commission forbids fishing within 200 yards of Bagnell and Powersite dams to prevent possible sabotage.
Survey shows turkey stocking most successful where wild stock released; worst where semi-wild birds released. Recommends cutting back on purchase of B. K. Leach's turkeys.

November 9, Jefferson City: Commission names Jay Morrow "coordinator of wartime activities."

December 14, Jefferson City: Commission promotes Agent Kenneth R. Hicks to field service agent.

1941–42 Summary: Cooperative fish rearing pond program established.
Department now has 251 employees, 1943 budget of $686,300.
First farm forestry projects initiated.
Education Section established.
First pollution investigations undertaken.
Lake Wappapello impounded 1941.

1943

February 13, Kansas City: Commission approves publishing *Conservationist* monthly, instead of quarterly beginning April, 1943.
Approves stocking only 3,000 quail.
Approves rough fish removal as wartime food measure at Sunshine Lake.

March 26–27, Columbia: Commission presents first ten-year service awards to 12 holdovers from Game and Fish Department.
Paul Q. Tulenko named state project leader.
A. Hugh Denney gets special recognition for state's and nation's first forest cover map.

April 17, Jefferson City: Department's federal aid organization: Paul Q. Tulenko, state project leader; special subject project leaders, A. S. Leopold (deer and turkey), A. R. Mottesheard (waterfowl), W. O. Nagel (furbearers). General subject leaders: A. H. Denney, C. W. Schwartz, W. Barbee, M. Baker, L. Lewis, B. Crawford (S. Kyd alternate).

June 19, Jefferson City: Commission establishes a Regulations Committee.

July 17–18, Joplin: Edward K. Love replaces Greensfelder as commissioner.

August 16, Jefferson City: Commission approves publication of *Prairie Chicken in Missouri*, by C. W. Schwartz.
Regulations Committee holds first meeting August 4.
Bode offers his resignation in dispute with Turnbull over assignment of Bruce Lewis. Turnbull moved to accept but did not get a second.

September 20–21, St. Louis: Commission hires Joseph Jaeger Jr. as forester.
Buys out B. K. Leach's semi-wild turkey stock for further experiments.

October 20–21, Jefferson City: Commission spent two days investigating malfeasance charges by St. Louis groups against Bode and Clark. Find no fault.
Ted Butler retiring as Conservation Federation executive secretary, replaced by G. Edward Budde.
Mingo Swamp National Wildlife Refuge approved; State Board of Health worried about malaria.
Authorized director to start rough fish removal program at Lake Ozarks.

November 18–19, Mexico: Commission assigns Benton Masters to remove rough fish at Lake Ozarks.

1943 Summary: Sugar Creek State Forest acquired.
1944 budget approved at $736,700. It is noted that permit sales did not fall off as anticipated during war.

1944

January 20–21, St. Joseph: Jay Morrow promoted to Field Service chief.

April 12, Jefferson City: Commission hires

Wilma Ketchum as administrative assistant in Education.

May 17, Sedalia: Fish and Game Chief Clark tells Lake Ozarks people that you cannot have different regulations for different impoundments, reflecting view of the time.

June 7–8, Jefferson City: Commission hires professional wolf trapper Herman O. Dulworth to deal with fox problems. Federal crop reporting service puts fox-caused losses in 1943 at $3,837,600.

July 14, Branson: Commission establishes first open deer season since 1937: two days, bucks-only in 17 counties, in response to pressure from landowners because of deer damage. Southwest Region conservation agents voted against season seven to five.
Federal Aid Section estimates deer herd at 15,000.

September 20, Fish and Game Chief Arthur L. Clark dies on hunting trip in North Dakota.

September 23, Jefferson City: Commission hires Ray M. Wells as conservation agent.

October 24, Rolla: Four top candidates to replace Clark are Clarence Cottam, Fish and Wildlife Service; Walter Gresh, FWS; Melvin O. Steen, Regional Director FWS, and Dr. Rudolf Bennitt of University of Missouri. Cottam declines consideration.

November 20, Jefferson City: Commission hires Melvin O. Steen as Fish, Game and Forestry Division chief.

December 27, St. Louis: Commission establishes a separate Division of Forestry and Development.
Creates a fifth Protection supervisory region, Ozark Region.

1944 Summary: Norfork Lake impounded.
Bradyville (later Otter Slough) Wildlife Area, Shannondale and Alley Spring state forests acquired.
Two-day deer season in 20 counties, 589 deer taken.
Budget for 1945 approved, first to top $1 million.

1945

January 27, Jefferson City: R. S. Bristol and Ben Johnson of St. Louis ask for special archery deer season; (19 states have such a season).
Aubrey R. Hammett Jr. resigns as legal counsel.

April 20, Skaggs Ranch, Taney County: Stephens absent.
Concern expressed about civilian ammunition supplies.
Enter agreement with Western Cartridge Co. and University of Missouri for a study of quail habitat.

May 25, Jefferson City: Stephens tells Commission doctor has ordered him to slow down. Offers to resign, but others ask him to continue.

June 22, Jefferson City: Commission hires Lon S. Haymes of Springfield as legal counsel.
Transfers Development Section from Forestry to Fish and Game Division.

July 20, St. Louis: Love absent. Stephens elected chairman again, Stoner vice-chairman, Turnbull secretary, Love member.
Hires John L. Funk as fisheries biologist.

August 24–25, Crane and Springfield: Love absent.
Robert A. Brown Jr. replaces Stoner as commissioner, elected vice-chairman.
Commission hires J. Warren Smith as chief engineer.
Predator Control Specialist Louis J. McIntosh hired.
Master Conservationists are Ted Butler, John Case, Allen McReynolds.
First research study of pheasants under federal aid begun.

September 12–13, Jefferson City: Love absent.
Commission creates an assistant chief of Protection position.
Report of survey on gigging made by Robert Conlan and Associates of Kansas City. Majority of those polled oppose gigging in Southwest Missouri.

October 17, Jefferson City: Commission promotes District Supervisor Vernon Bennett to assistant chief of Protection.
Special wolf/fox hunting project discontinued.

December 12, Jefferson City: Commission reappoints Bode director for four-year term.
Approves purchase of surplus L4 airplane ($2,600) with Biologist Harold Terrill to pilot.

1945 Summary: Peck Ranch acquired.
Deer season Nov. 1-3 in 21 counties.
Approves budget of $1,896,467.85.

1946

January 16, Jefferson City: Love absent.
Commission grants C. W. Schwartz, administrative assistant in Information, a two-year leave of absence to work for the Board of Commissioners of Agriculture and Forestry in Hawaii.

February 20, Jefferson City: Commission rents second floor of Herman Building for Forestry.
Purchases 10,585 acres from B. K. Leach, Egyptian Tie & Timber Co., that became parts of Cardareva, Paint Rock and Deer Run state forests.
Fountain Grove Wildlife Area purchased. Towell returns from service and is named assistant state forester.

March 28, Joplin/Carthage: Brown and Love absent.
At a public meeting in Carthage Stephens says Commission has raised no fees to date.
Rents third floor of Herman Building for Protection and Education.

June 12, Jefferson City: Creates a Game Section within Fish and Game Division, with Paul Q. Tulenko as chief.
Leroy J. Korschgen hired to do food habits studies.

July 17, Montauk Park: Stephens and Love absent.
Commission names Kenneth R. Hicks assistant field service chief.
Ray Wells promoted from agent to field service agent.
Master Conservationists are Major General E. M. Stayton of Independence, Chester C. Davis of St. Louis and H. J. Waters of Columbia.
Adopts policy on community and other lake construction.

August 21, Jefferson City: Love absent.
Agent James L. Bailey promoted to Ozark Region supervisor.

September 25, Jefferson City: Commission hires Floyd C. Larsen as engineer.
Legislature appropriates $150,000 for forestry work.

October 14, St. Joseph: Commission rules that no employee may hunt deer in 1946 season.
Aden Bauman promoted to chief fisheries biologist.
Adopts regulation pertaining to forfeiting articles unlawfully used to take wildlife to the state. (In 1960 or '61 a judge ruled this was invalid, could not apply to personal property.)

November 14, Jefferson City: Love absent.
Forest Cropland agreements begun under State Forestry Act. All Department land put under forest cropland.

December 17, Jefferson City: Love absent.
Commission hires Clarence Billings as education advisor.
Initiates a "Wildlife Food and Cover Program."

1946 Summary: Commission approves special archery deer season for Crawford County, Oct. 24-26, $3 permit.
Commission approves 1946-47 budget at $1,820,600.
Wildlife and Forestry Act of 1946 declares title to wildlife belongs to the state, establishes powers of agents, fixes penalties for violations of Commission rules. A separate State Forestry Act of 1946 establishes forest cropland program, provides penalties for woods arson.

1947

January 14–15, Jefferson City: Charles Callison resigns as assistant Information officer to become executive secretary of the Conservation Federation.

March 13–14, Jefferson City: Commission combines Information and Education sections into a division, with F. O. Capps as chief.
Combines Protection and Field Service into Field Division, with Jay Morrow as chief. Kenneth Hicks is Field Service chief, Vernon Bennett is Protection Section chief and reorganization eliminates Asbury Roberts.
Budgets and Accounts changed to Fiscal Division.
Ted Shanks hired as game biologist.
Approves building of lake in Mercer County, first major lake project. (Lake Paho)

April 27, Rolla: Commission fires Asbury Roberts, chief of Protection, citing lack of cooperation between Protection and other divisions as cause.
Approves acquisition of the Busch Area. Mrs. A. A. Busch puts up $70,000 towards its purchase.
Harold Clover replaces Callison as Information chief; Dan Saults is assistant chief.

May 15, Van Buren: Love absent.
Commission hires Allen Brohn as game biologist.
Names Weldon Spring purchase "August A. Busch Wildlife Area;" Bruce Lewis first Busch Area manager.

June 25, Jefferson City: Commission votes Master Conservationist Award for Edgar Queeny, president of Monsanto Chemical Co., for his excellent motion picture on prairie chickens.
Adopts policy that Department buildings will be white with green trim.
Approves hiring pilot.

July 24, Columbia: Love absent.
Commission adopts "Lake Paho" as name of Mercer County lake; "Paho" means "first" in a Sioux Indian dialect.
This was Sydney Stephens last official meeting.

August 13, Jefferson City: Love absent.
First Commission meeting without Stephens.
Frank P. Briggs replaces Stephens as commissioner. Dru L. Pippin replaces Turnbull.
Commission votes not to use proxies; establishes quorum of three members to transact business.
Negotiates agreement with Forest Service to operate Licking Nursery; Meramec Nursery produced two million trees.
Jay Morrow is chairman of Regulations Committee. C. W. Schwartz returns from Hawaii, transfers from Information to Game Section as senior biologist.
Master Conservationist voted for Stephens and awarded at testimonial dinner, September 15, 1947, at Coronado Hotel in St. Louis.

August 31, Aden C. Bauman, chief fisheries biologist, killed in plane crash while surveying ponds.

September 16, St. Louis: Commission approves use of muzzle loaders for deer hunting.
Employees again forbidden to hunt deer in 1947.
Edgar Queeny did not appear at Stephens' dinner to receive Master Conservationist Award.
Special Investigative Group in Protection formed. It was subsequently disbanded because other employees feared its purpose was to investigate them.

October 14, Jefferson City: Special meeting.
Two days of hearings in Jefferson City on malfeasance charges against Bode (Cance Pool incident). Bode completely exonerated.

October 29–30, Steelville: Commission presents ten-year service awards to Terrill and Bode, first Commission employees to reach ten years.
New officers elected: Brown chairman, Pippin vice-chairman, Love secretary, Briggs member.

December 16, Jefferson City: Queeny not eager to receive Master Conservationist Award so it was deferred until some later date.

1947 Summary: August A. Busch, Fountain Grove and Lake Paho wildlife areas acquired.
1948 budget, $2,873,000.
1947 gun deer season: Nov. 6–8 in 25 counties.
Archery deer season: Crawford County, Oct. 28–Nov. 1.

1948

January 22–23, Joplin/Neosho: Commission gives vote of confidence to Bode in aftermath of Cance Pool charges.

February 19, Commission signs cooperative agreement with U. S. Forest Service for forest fire protection and wildlife management in national forests. Renewed in 1951 and 1974.

March 7, St. Louis: Master Conservationist Award for Queeny withdrawn.

April 24, St. Joseph: Love and Pippin absent.
Commission re-hires P. G. Barnickol as senior fisheries biologist.
Adopts accelerated multiflora rose program.
Carl Noren transferred from Game to Fisheries as administrative assistant.
Harold Clover resigns as Information chief.

May 27, Jefferson City: Director asks all new employees to spend two days in Central Office; beginning of new employee orientation.
Opens Fountain Grove Wildlife Area.
Dan Saults named chief of reorganized Information Section.

June 16, Jefferson City: Commission hires Osal B. Capps as forester, effective July 1.

September 27, Jefferson City: Commission hires Earl P. Coleman as conservation agent.

October 17, E. Sydney Stephens dies of heart attack.

November 16, Jefferson City: Employees forbidden to hunt at Fountain Grove, so as not to compete with the public.
Commission resolution memorializes Sydney Stephens.

December 1, Federal refuge employees Herbert H. Dill and William H. Thornsberry invent the cannon-net trap for waterfowl.

December 14, Jefferson City: Master Conservationists are Leonard Hall of St. Louis, Mrs. Virginia Dunlap of Rivermines and Jim Stone of Neosho.

1948 Summary: Clearwater Lake impounded.
1948-49 budget, $2,807,508.
1948 gun deer season open in 25 counties, Dec. 6-10.
Archery deer season: Taney County, Nov. 26-Dec. 4.

1949

February 1, Jefferson City: Commission hires Donald E. Wooldridge as photographer.
Rivers of Missouri published.

February 22, Jefferson City: Commission approves Trimble waterfowl area.
Department staff may serve on Conservation Federation committees in an advisory capacity only, not as voting members.

March 25, Carthage: Commission approves installation of concrete floor at wildlife pavilion at State Fair.

April 19, Jefferson City: Commission hires John Kullman as forester.

May 24, Jefferson City: A second exhibit trailer approved.

June 20-21, St. Louis: Commission promotes Jay B. Morrow from Field Division chief to assistant director.
Vernon Bennett promoted to Field Division chief.
A large group headed by James Gianladis, president of United Sportsmen's League, and J. Earl Root, president of Midwest Amateur Regional Field Trial Association, presented demands for operation of Busch Area favoring field trialers.

August 3-4, Jefferson City: Gen. Clifford W. Gaylord replaces Love as commissioner.
New officers are Brown chairman, Pippin vice-chairman, Gaylord secretary, Briggs member.
Commission rents office above Stegmaier Jewelry, occupied by Development Section.

September 29, Jefferson City: Briggs absent. Commission grants Maurice Baker a leave of absence and promotes Bill Crawford to state project leader.
Commission opposes dams on Current River.
Employees may hunt deer on third and fourth days of season, but not in county where assigned.

October 27, Jefferson City: Gaylord absent.
Commission hires John E. Wylie as forester.

November 22, Jefferson City: Commission does not oppose Meramec Dam, but is opposed to dams in the Ozarks generally.
Master Conservationists are Harry Hill of Joplin and C. C. Williford, Springfield weatherman.

December 12, St. Louis: Staff reports 60 tons of sericea lespedeza and Reed canary grass for wildlife plantings were distributed.

1949 Summary: 1949-50 budget, $2,980,697.
1949 gun deer season Dec. 6-10 in 25 counties.
Archery deer season in Taney County.

1950

January 17, Jefferson City: Korean War beginning to be felt in various ways, principally manpower.
Governor issues statement opposing Meramec Basin reservoirs.

February 23, Jefferson City: Gaylord and Briggs absent.
Resolution memorializes Dr. Rudolf Bennitt who died Feb. 20.
Employee service review system initiated.

April 21–22, Columbia: Three new fisheries biologists, including Charles A. Purkett, hired in anticipation of Dingell-Johnson Act.
Conservationist circulation at 46,000.

June 19, Jefferson City: Bode's four-year appointment expires. Commission votes to carry on his employment without specified term.
Issues revised statement of policy on dams urging statewide plan recognizing wildlife interests.
Edwin H. Glaser hired as forester.
Steen proposes waterfowl hunting area near Mingo.

July 17, St. Charles: Commission approves Mingo shooting area, to be known as Duck Creek.
Kerwin F. Hafner hired as forester.
James L. Bailey promoted to Protection Section chief.

August 16, Jefferson City: Briggs absent. Commission officers are Brown chairman, Pippin vice-chairman, Gaylord secretary, Briggs member.

September 25, Jefferson City: A. R. Mottesheard transferred from Field Service agent to School of the Ozarks, effective September 1.
Employees may hunt deer three days instead of two, but not in county where assigned.

October 26, Jefferson City.: Allen Brohn recommends doe season for Ste. Genevieve Co.; Commission approves in principle, but urges educating the public to need for doe season.
New agent replacements on temporary basis due to Korean War. Written and oral tests dropped until next general testing.
Approves negotiating purchase of 2,500 acres at Duck Creek.

December 12, Macon: Commission rules employees may be placed under Social Security; Bode ordered to support this.
Master Conservationists are Dean W. Davis of West Plains and Ben M. Smith of Boonville. Commission wants to review Master Conservationist program before making any further awards.

1950 Summary: 1950–51 budget, $3,043,940.
1950 gun deer season Nov. 27–Dec. 2 in 26 counties.
Archery season Nov. 13–22 in Taney County.

1951

January 11, Jefferson City: Gaylord absent.
Master Conservationist program temporarily suspended.
Commission contracts with Charles Callison to write history of the Department's origins.

February 18–19, Kansas City, Gaylord absent.
PL 681 (Dingell-Johnson Act, federal aid to fisheries) passes 81st Congress.
James F. Keefe hired as Information writer.
Gordon Smith hired as Information and Education chief; F. O. Capps demoted to Education Section chief, Frazier demoted to Education administrative assistant.

March 14, Precipitin test that identifies deer blood and meat developed by biologists Allen Brohn and LeRoy Korschgen; aids in poacher prosecution.

March 31, March forest fires in Ozarks total 1,062, as 65 mph winds push flames across 89,509 acres.

June 11, Jefferson City: Gaylord and Briggs absent.
E. Sydney Stephens Memorial Fellowship of $1,000 established at Missouri University.
Crowe Mining Co. deeds 950 acres to Judge Haysler A. Poague, who deeds it to the Commission (Poague Area in Henry County).

July 1, Lake Paho in Mercer County opens. First major public fishing lake built by Department.
Record summer flooding on major rivers.

July 15, St. Louis: Joe M. Roberts replaces Brown as commissioner.
Commission rules no chairman can succeed self. Stephens had chaired for ten years, Brown for four.
New officers are Briggs chairman, Pippin vice-chairman, Gaylord secretary, Roberts member.



A 1949 aerial view of the newly opened Fountain Grove Wildlife Area.



In 1950, Field Service Agent Cecil Davis showed a 4-Her some grain favored by quail.



Attempts to repeal or dilute Amendment 4 prompted this Fitzpatrick editorial cartoon from a 1949 St. Louis Post-Dispatch.



The distinguished Nature Knights badge.



Visitors to Rockwoods Reservation in the Department's early years met gentle George A. Moore, above, the resident naturalist. When budget pinches wiped out his position, he continued to work as a volunteer.



Protection chief James L. "Red" Bailey, above, in 1950; below, a Special Picnic Seine Permit issued in 1946 that allowed parties to harvest enough fish for a fish fry.

STATE OF MISSOURI

SPECIAL PICNIC SEINE PERMIT

Nº 3231

This permit grants to: A. W. Finnell
Name

1005 E. 13th
Address

Sedalia
City

Pettis
County
, Missouri, the privileges accorded under a Special Picnic Seine Permit as provided by the Wildlife and Forestry Code of the State of Missouri.

Fishing Permit No. 05-02410 Seine Length 75' feet; Depth 8' feet; 2" mesh

to be used at (Location)

on the day of , 194 6.

This permit does not authorize the use of a trammel net, nor such practices commonly known as hand fishing, noodling, logging or rock fishing and similar terms.

Date issued 194

Accepted by:

A. W. Finnell
Signature of Permittee

CONSERVATION COMMISSION
I. T. Bode, Director

By: Wm. H. Strasse
Wildlife Conservation Agent

VALID ONLY ON THE DATE SPECIFIED.

I X44451

First formal agents training class, Paul G. Brooks, instructor. Trainees are Chester Barnes, Fred Drummond Jr., Wilbur S. Barnhart, H. G. Gretlein, Glenn Hartsock, Jack Hoey, Edward Kattelmann and Lloyd Phillips.
Kenneth Sadler assigned to turkey restoration.
Reed Twichell assigned to river basin investigations.

July 23, Heavy Missouri River flooding strands fish; public is urged to harvest them.

August 13–14, Jefferson City: Gaylord absent.
Allen Brohn promoted to senior technician, mammal unit.

September 9, Rochester, New York: Gaylord absent.
Commission decides employees may hunt deer without restrictions for the first time.
Conservation Federation opposes "any-deer" season that has been recommended by Game Section. Much opposition.
Standardized area signs adopted.
W. O. Nagel transferred from Game Section and assigned to Fish and Game Division as biologist/writer.
Dean A. Murphy hired as deer biologist.

October 4, Jefferson City: Gaylord absent.
Commission purchases Duck Creek for a "high" $45/acre.
Formally accepts 900-acre area in Clinton County from Haysler A. Poague.
Opposition to "any-deer" season voiced by Izaak Walton League of Joplin, Southeast Missouri Sportsmen's Association, Gasconade and Taney county citizens.

November 26, St. Charles: Gaylord absent.
Commission accepts $29,333 from new Dingell-Johnson funds.
Fisheries Biologist Edward M. Lowry develops the "nomograph," a device for calculating the length of fish at any time in their lives from lines on fish scales.
Heavy snow during deer season strands many hunters. At least 5,519 deer taken in first "any-deer" season.

December 29, Phone conference.
Commission approves taking option on State Street property as headquarters site.
A "group of St. Louisans" wants to raise funds for Department building; sends $1,000 in seed money from Chris J. Muckerman and David Crossen.

1951 Summary: 1951-52 budget, $3,439,052.
Stocked 2.5 million fish in 2,733 ponds, 260 lakes.
Two percent of protected forest area burned in Easter weekend fire.
Missouri farmers set out more than 3.5 million multiflora rose plants in 1951.
Coyote bounties amount to $54,936.50 in 106 counties in 1951.
Duck Creek and Poague wildlife areas acquired.
1951 gun deer season: Nov. 5-7 "any-deer" in 15 counties; "bucks-only," 17 counties.
Archery deer season, three days in Crawford County.

1952

January 7, St. Louis: Commissioner Clifford W. Gaylord died Jan. 7.
Commission establishes 40-hour week; employees previously worked one-half day Saturdays.
Approves land purchases for Hunnewell Wildlife Area.

February 26, Jefferson City: Roscoe B. Clark replaces Gaylord as commissioner.
Commission reaffirms opposition to dams on Eleven Point River.
Francis "Bud" Eyman hired as agent.

April 4, Jefferson City: Commission accepts gift of Reed Area land, 831 acres.
Approves formation of special investigative agents and assigns to counties.
Archers ask for 16-day season and more counties.

April 28, Biologists report turkey population down from 3,289 in 1947 to 2,371 this spring, probably lowest point.

May 16, Jefferson City: Commission refuses to adopt retirement at 65 policy.

June 5, Jefferson City: Commission gets "any-deer" season approval from Federation.
Extremely hot dry weather causes 208 forest fires. Beginning of three years of drought, high temperatures.

July 17, Jefferson City: New officers are Pippin chairman, Roberts vice-chairman, Clark sec-

retary, Briggs member.
County hunting permits abolished, beginning in 1953.

September 24, Jefferson City. Commission places first bag limit on rabbits for 1953 (ten per day).
Approves Peck Ranch management plan for turkeys.
Opens part of Indian Trail to deer hunting.
Ira Gabrielson hired to study Department programs.
Milton G. Hoyer hired as assistant state forester, timber management, replacing Arthur B. Meyer who resigned to edit the *Journal of Forestry.*
Trimble Wildlife Area opened to fishing.

September 29, Simultaneous release of new quail movie by C. W. Schwartz, *Bobwhite Through the Year* and new quail bulletin by Jack Stanford, "Whirring Wings."

October 31, Governor proclaims fire danger emergency Nov. 1; all outdoor activities halted. Deer season postponed. About 30,000 acres burned in past week.

November 1, Phone conference on drought and fire danger.

November 6, St. Joseph: Commission establishes Lake Wappapello area regulations.

November 10, Governor calls off fire danger emergency.

November 12, Phone conference. Deer season rescheduled for Dec. 4-6.

November 19, Circuit Judge Gordon Dorris rules in favor of angler in stream trespass case, Elder vs. Delcour. This was a friendly test case to determine fishermen's rights to fish streams. Eventually went to Supreme Court and in 1954 Missouri streams, where anglers might canoe and wade, were declared "public waters."

December 1, Biologists report 2,500 beaver colonies with 12,500 beavers in 87 counties—a 100 percent increase in two years.

December 11, St. Louis. Commission changes agent qualifications; deletes "from white race."
Okays sponsorship of Department radio programs if use disclaimer that Department does not endorse products.

1952 Summary: 1953 budget of $3,877,219 approved.
Bull Shoals Lake impounded.
Reed and Hunnewell wildlife areas, Little Indian Creek State Forest acquired.
Drought begins; high fire danger.
Fishing rights case begun.
1952 gun deer season: Dec. 4-6, in 42 counties; 23 counties "any-deer."
Archery deer season Oct. 16-31 in five counties.

1953

January 1, First permit price increase since 1947: hunting $3, fishing $2; trapping $3; county hunting-trapping-fishing permit eliminated.

January 29-30, Jefferson City: All commercial sales of rabbits to cease Feb. 7.
Charles Callison's *Man and Wildlife in Missouri* published.

February 19, Ira N. Gabrielson of the Wildlife Management Institute begins study of Missouri's conservation program.

February 23-24, Jefferson City: Commission hires Wilfred R. Nunn as associate editor for the *Conservationist* magazine, replacing Darrell Meyer.

March 20, Carthage, Drake Hotel: Pippin absent. Commission negotiating with Mrs. James A. Reed over purchase of additional Reed Area lands.

March 22, Former commissioner, Edward K. Love, dies.

April 3, Commission opposes legislative resolution that would require bi-partisan commission and bi-partisan hiring of employees. Denies any political considerations in hiring personnel.

April 17, Film *Bobwhite Through the Year* wins CONI Grand Medal at international film festival in Rome.
Biologist Ken Sadler estimates there are only

2,300 wild turkeys in 123 flocks in 23 counties.

April 18, Jefferson City: Pippin absent. Memorial resolution to Edward K. Love.
Rep. Walter T. Bollinger, Carter County, wants liberalization of gigging season or threatens to "blow the works" at a Legislative Committee hearing April 22. Commission notifies Bollinger his suggestion is under study.

May 30, Trimble Wildlife Area opened to fishing.

June 2, Hannibal, Mark Twain Hotel: Dry, hot weather causes forest fires; streams and lakes extremely low.
Commission purchases 500 copies of *Man and Wildlife* for employees.
Legislature passes a bill prohibiting Commission from building a headquarters.

June 26, Meramec State Park: Gabrielson Study received. He reports Department programs are good and offers few suggestions for improvement.
Attorney General John M. Dalton says legislation forbidding construction of a building by Department is clearly invalid.

July 29–30, St. Louis, Statler Hotel: Briggs and Pippin reappointed as commissioners.
New officers are Pippin chairman, Roberts vice-chairman, Clark secretary, Briggs member.
Commission approves Department's five-year plan, based on Gabrielson study.
Missouri Quail Hunters Association offers plan for quail.
Drought continues, concern about wildlife production.

September 22, Kansas City: Assistant Director Jay B. Morrow winds up 25 public meetings over the state, discussing regulations and drought effects on wildlife and forestry.
Fire consumes 2,300-acres on Peck Ranch, destroys wild turkey production range.

September 24–25, Clinton: Governor issues fire danger proclamation; "Every Sportsman a Fire Fighter" campaign launched.
Commission establishes pheasant shooting area permit; removes all limits on crappie.

October 2, Director I. T. Bode announces the successful completion of deer restoration project.

October 22–23, Cape Girardeau: Biologists report deer hunters at Indian Trail were one per eight acres. Deer harvest heavy.

December 17, Jefferson City: Commission abolishes position of refuge supervisor, as refuge program winds down.
Despite dry, hot weather, number of forest fires down.
Weatherman C. C. Williford says normal Ozark rainfall is 41.51 inches. In 1952 it was 29.28 inches and in 1953 was 25.21 inches, the lowest ever recorded.

1953 Summary: 1953–54 budget approved, $3,834,037.
James A. Reed Memorial Wildlife Area acquired.
Waterfowl cannon-net trap adapted to turkey trapping by Biologist Kenneth Sadler and Ray Woodring at Carmen Spring Refuge.
Conservationist circulation at 64,000.
In last five years, 4,500 miles multiflora rose fence planted.
1953 gun deer season: Nov. 5–7, in 47 counties with 41 "any-deer." Archery season Oct. 16–31, in 41 counties.

1954

January 18, Jefferson City: Commission approves experiments with exotic pheasants.

February 17, Jefferson City: Permit sales and income down due to drouth. Commission orders hold on purchases until further notice.

March 26, E. M. Kopplin, longtime fish hatchery superintendent, killed in truck crash.
Forest fires consume 30,000 acres in three-day period.

April 1, Biologist George Dellinger employed, assigned to Ozark deer research.

April 9, Jefferson City: Agents and biologists doing drouth survey in 36 counties.
Ducks Unlimited donates $35,000 for Gaylord Laboratory Building at Duck Creek.
Gus Artus and Lew Helm first biologists sent to band waterfowl in Canada.
Commission declines request by Missouri Quail Hunters to cooperate in quail release project.

May 25, Springfield: Commission gets drouth survey report; shows habitat conditions poor, but wildlife numbers fair.

Commission rejects recommendation for non-resident deer hunting.

June 17–18, Jefferson City: John Lewis transferred from cover restoration to turkey restoration.

July 14, Macon: New officers are Clark chairman, Briggs vice-chairman, Pippin secretary, Roberts member.

August 2, Jefferson City: Low income continues to fret Commission.

September 14, Seattle, Washington: Administrative Secretary Bettye Hornbuckle resigns; Helen Cooper hired as replacement.

October 6, Migrating birds perish in collision with Columbia TV tower; 2,000 are killed.

October 19, Jefferson City: Commission abandons hatchery at Branson that was deeded to old Fish and Game Department in 1929. Forty-two semi-wild, Woodmont strain turkeys from Maryland released at Swan Lake, as experiment.

Biologist Allen Brohn warns sportsmen not to import so-called San Juan rabbit because of possible harm to native rabbits.

November 4–5, Jefferson City: Commission establishes trout fishing area on Current River below Montauk.

November 10, First open season for pheasants since 1943.

December 9, Jefferson City: Commission asks Bode to check on a retirement plan for employees.

1954 Summary: 1954–55 budget approved, $3,818,559.

Ketcherside Mountain State Forest acquired.

1954 gun deer season: Nov. 3–6 in 56 counties; 44 "any-deer." Archery season Oct. 1–31.

1955

January 13, Jefferson City: Briggs, Roberts absent.

Ducks Unlimited gives additional $15,000 for Gaylord Laboratory.

February 3, Jefferson City: Commission plans release of 60 turkeys from Pennsylvania on Daniel Boone State Forest, as experiment.

Approves a credit union for employees.

Enters agreement with Fish and Wildlife Service to establish Swan Lake Hunting Area in fall of 1955.

February 18, "Woody the Singing Forester" (H. P. Bledsoe) radio series being aired by radio stations.

April 15–16, Jefferson City: Department gets 70 pairs of coturnix quail from California for experiments; receives another 50 from Pakistan.

Commission approves second Canadian banding crew, composed of Richard Vaught and Yuell Willis.

May 5, Boonville: Chairman R. B. Clark to represent the Commission at Right Reverend Monsignor George J. Hildner's Golden Jubilee Mass at St. John's (Gildehaus) Church, May 10, "in appreciation of Rev. Hildner's outstanding accomplishments in conservation work."

Memorial resolution on death of A. P. Greensfelder, former commissioner.

June 15–16, Jefferson City: James F. Keefe takes over as managing editor of the *Conservationist.*

Commission approves $150/year extra flight pay for employees doing low-level flights.

Adopts policy on small, "community" lake program.

Authorizes conservation agent staff of 100 officers, plus ten supervisors.

July 8, Fisheries Biologist Richard C. Marzolf drowns while using diving lung in research at Busch Area.

July 18, Estes Park, Colorado: Pippin absent. Ben Cash replaces Clark as commissioner.

Commission officially establishes Swan Lake Area; regulations adopted.

Gordon Smith resigns as Information and Education Division chief.

Josephine A. Radmacher employed.

August 25, Jefferson City: New officers are Briggs chairman, Cash vice-chairman, Pippin secretary, Roberts member.



Biologist Donald M. Christisen, whose career spanned forty-two years, studied rabbits and prairie chickens. He helped start the Missouri Prairie Foundation and was a recipient of the American Motors Conservation Award.



A vocational agriculture class gathers multiflora rose seed in 1950.



The cannon-net trap, developed at Swan Lake National Wildlife Refuge, is here used to capture Canada geese in 1964. Refinements in techniques also made it useful for the wild turkey restoration effort.



Gathered in Columbia for the retirement party of E. Sydney Stephens on July 25, 1947, were Commissioner Bob Brown, R. B. Price, a Columbia banker, Stephens, Commissioner Owen Turnbull and I. T. Bode.



Forestry employees attended annual training schools, where they boned up on topics like forest fire control, topographic map reading and first aid.



Agent Earl Coleman models the uniform adopted for use from 1948 through 1958.



Assistant Director Jay Morrow in 1952.

John V. Frye hired as agent.
Fire Control Chief William E. Towell says forest fires in 1955 affected less than one-half of one percent of area protected—the best year ever.

September 23, Jefferson City: Staff discusses a coturnix quail project with Commission.
Commission promotes Kenneth Hicks to Information and Education Division chief.
Ray M. Wells promoted to Field Service chief.

October 29, Kansas City: Commission promotes Conservation Agent Allen Hoefelman to full-time aircraft pilot.
Establishes Trails Ranch Wildlife Area (Callaway County) for five-year experiment with prairie chickens.
Forester Joseph Jaeger Jr. resigns to accept post of State Parks chief.

November 15, Jefferson City: Commission accepts 40 acres from Lue Lozier for Green Experimental Wildlife Area.
Coturnix quail stocking plan detailed.

December 8–9, St. Louis: Retirement plan for employees discussed.

1955 Summary: 1955-56 budget approved, $4,169,880.
Swan Lake and Green wildlife areas, and Jamesport, Ray County, Limpp and Malta Bend community lakes acquired.
1955 gun deer season: Nov. 1-5, 61 counties; 53 "any-deer." Archery season Oct 1-31.

1956

January 4, Assistant Director Jay B. Morrow died of heart attack.

January 6, Jefferson City: Memorial resolution on Assistant Director Jay Morrow.
Fire danger high as drought continues.

January 19, Jefferson City: Pippin absent. Commission adopts Memo of Understanding with Soil Conservation Service in several counties. Field Service agents helping with wildlife plans on SCS projects.
Twenty-one wild-trapped turkeys released in Ste. Genevieve Co. in restoration experiment. Two areas in north Missouri get semi-wild birds.

February 17, St. Louis: Commission adopts impoundment policy with respect to acquisition and management.
Adopts fish planting policy on public and private waters.
Purchases area to build Salem Shop.
Endorses federal "soil bank" farm bill as boon to wildlife.

March 8, New Orleans, LA: Commission accepts license to run area below Table Rock Dam.

April 20, Jefferson City: Commission appoints William E. Towell "junior assistant to the director," replacing Morrow.
Osal B. Capps promoted to assistant state forester-fire control.
Small lake program to date: Jamesport Lake, Vandalia Lake, Ray County Lake completed; lakes in Howell, Worth, Carter and Boone counties and Malta Bend Lake have been approved. Under study are lakes in Ripley, Scotland, Scott counties and Limpp Lake in Gentry County.

May 17, Jefferson City: Attorney general says Commission cannot set up employee retirement program.
Commission approves rough fish removal program in Wappapello Lake because of declining fish catches.
Kansas City Power and Light Co. offers Montrose Lake area.
Conservationist circulation at 98,000.
Wildlife research staff moves from Stephens Hall to 407 College Ave., Columbia. Fisheries research at 903 Elm Street.

June 12, Macon: Melvin O. Steen, chief of Fish and Game Division, resigns to become director in Nebraska.

July 10, Springfield, IL: New officers are Roberts chairman, Pippin vice-chairman, Cash secretary, Briggs member.
Swan Lake goose hunting area to open in fall.
Employees ask for air conditioning; request denied.

August 9, Jefferson City: Commission approves Ripley County lake on U. S. Forest Service land.
Nine new areas approved for stocking with wild-trapped turkeys.

September 26–27, Jefferson City: Bode resigns effective December 31; Commission accepts "with regret."
Commission approves Scott County lake (Tywappity).
Approves agreement with K. C. Power and Light Co. to manage Montrose lands.
Negotiates lease with Corps of Engineers for trout hatchery below Table Rock Dam.

October 10, Boze Mill: Special meeting. Commission invites Thomas Kimball of Colorado to consider director's position. He declines.
Towell empowered to sign for director.

October 31, Branson: Commission issues news release asking for applications for director's post.

November 27–28, Jefferson City: Towell named acting director.
Larry R. Gale hired as Fish and Game chief, effective Jan. 1.
Little Dixie Lake project approved.
Deer season opens despite high fire danger.
Limited commercial fishing approved for Wappapello as experiment to improve fishing.

1956 Summary: I. T. Bode, first director, retires.
1956–57 budget approved, $4,712,410.
Six thousand miles of multiflora rose planted.
Eighteen million fish stocked in 6,229 ponds, 668 lakes.
One percent of protected forest area burns.
Swan Lake and Duck Creek waterfowl areas established.
Dean Davis, Vandalia, Tri-City, Worth County areas acquired.
Pellet trout food experiment is success.
Wild-trapped Missouri turkeys stocked in Ste. Genevieve County, elsewhere.
Coturnix quail experiments begun.
Montrose Lake impounded 1956.
1956 gun deer season: Oct. 30–Nov. 3. Archery season Oct. 1–30.

1957

January 3, St. Louis: Commission approves purchase of Huzzah Wildlife Area.
Former Commissioner Owen Turnbull urges choice of M. O. Steen as director.

February 14–15, St. Louis: Commission approves a Hunter Safety program, a lake for Chariton County, and a wildlife management area at Montrose.
Commission approves Harold DeSherlia as contract commercial fisherman at Wappapello.

April 26–27, Kansas City: Commission names William E. Towell director, Dan Saults assistant director.

May 20, Jefferson City: Resolution from House of Representatives complimenting Towell and Saults for being "native Missourians," a slap at former director, I. T. Bode.
Commission renews rough fish removal contract at Wappapello. Results poor, few rough fish removed to date.

June 10–11, Jefferson City: Dean Davis Wildlife Area lake develops leak.

July 25, Jefferson City: New officers are Pippin chairman, Cash vice-chairman, Briggs secretary, Roberts member. Roberts' term has expired but he continues to serve.
Commission promotes James F. Keefe to Information officer.
State Retirement System goes into effect.
Low water conditions caused by drought force closing of Trimble Wildlife Area Lake to fishing August 11.
Fire protection extended to seven more counties.

August 15, Jefferson City: Roberts continues to serve.
Commission approves establishment of St. Louis and Kansas City offices.
Gale and John Lewis propose a 1958 turkey hunting season.

September 19, Jefferson City: *Wildlife Code* simplification and revision approved for 1958.

October 7, Waynesville: New uniforms approved for agents.
Commission appoints Herbert S. Schwartz and Richard H. Rotsch to St. Louis and Kansas City offices.
Accepts 610 acres of land from Marshall I. Diggs for wildlife area.
Establishes trout area at Maramec Spring.

November 14, Jefferson City: State Retirement System adopted. Some older employees at this time are L. N. Elson, 71; Joe Green, 73; Lon Haymes, 70; Josh LaRue, 74.
Plaque to be given to retirees.



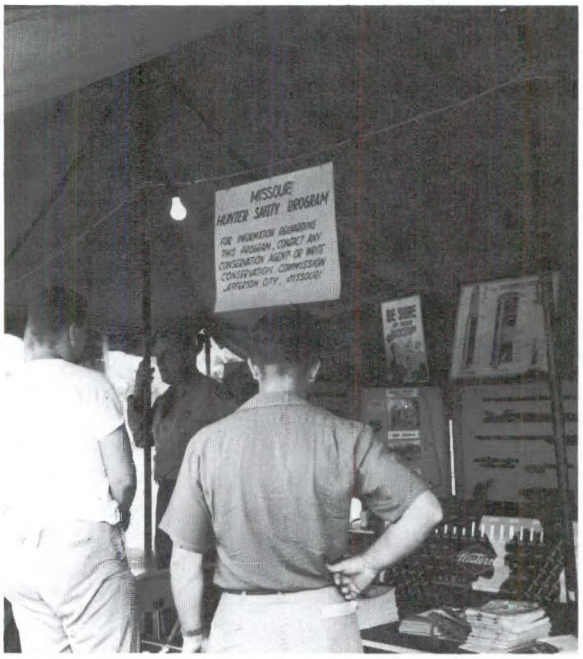
In 1953, Woody Bledsoe and the Ozark Smoke Eaters performed each afternoon at the State Fair.



District Forester Fred Whitt (in truck) and other foresters responded to a forest fire at Peck Ranch in 1953.



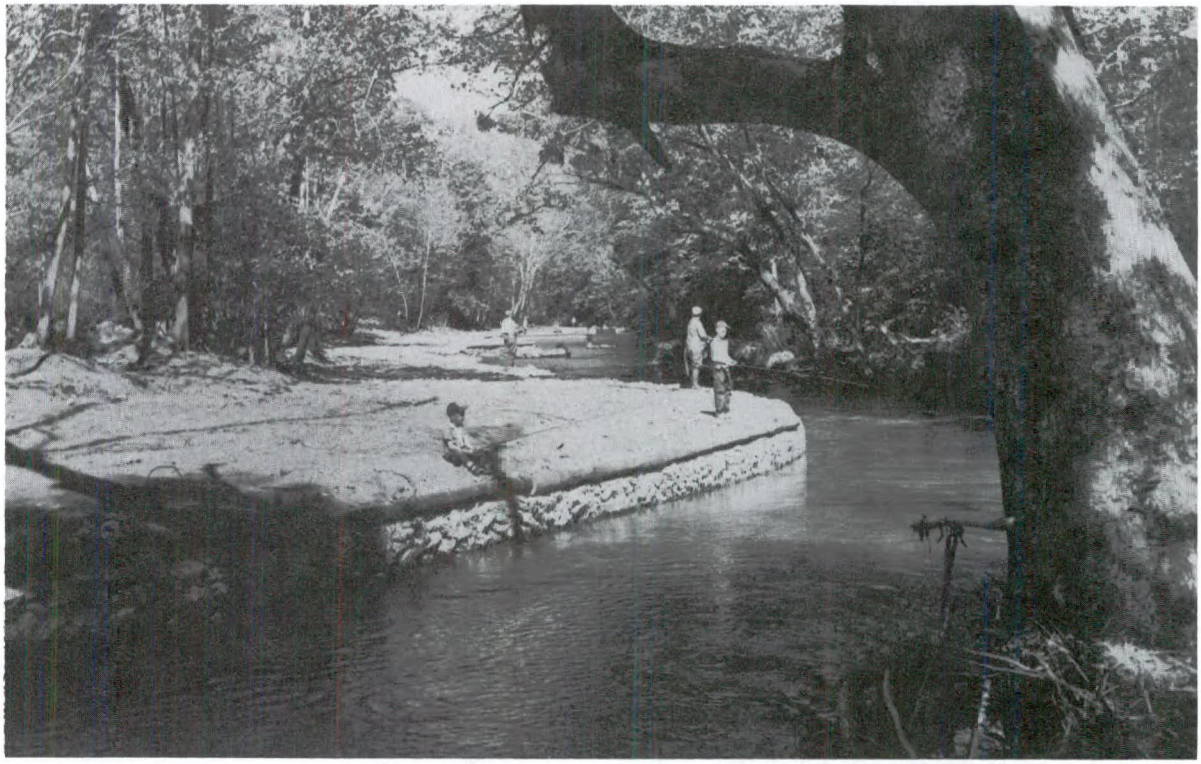
Jim Keefe interviewed a Johnson County farmer in 1952 about plans for planting multiflora rose.



This 1960 exhibit was an advertisement for the Department's hunter safety program, which began in 1958.



In the early days of the Department's conservation education effort, staffers lugged a film projector to hundreds of crossroads schools to entertain and inform about conservation.



Rock-filled gabions prevented erosion on the Current River at Montauk State Park in 1954.

Commission decides not to adopt a 1958 turkey hunting season.
Renews rough fish contract at Wappapello.
Okays joint publishing of *Mammals of Missouri* by C. W. and E. R. Schwartz with University of Missouri Press.

December 20, Jefferson City: Commission proposes purchases at Schell-Osage for waterfowl area.
Lon S. Haymes, legal counsel, retires.

1957 Summary: 1957-58 budget $5,099,434.
Planting 1,000 miles of multiflora rose; 10 million trees annually.
Conservationist circulation 107,000.
Miller, Tywappity, Little Dixie, Montrose wildlife areas, Huzzah State Forest and Shepherd of the Hills Hatchery acquired.
1957 gun deer season: Nov. 5-9, non-residents can hunt for first time. Archery Oct. 1-Nov. 30.

1958

January 17, St. Louis, Coronado Hotel: Commission rehires Aubrey Hammett as legal counsel.
Virgil McGill of Lexington approved to commercially fish Wappapello.
Agents swap old blue and olive-drab uniforms for new forest green uniform. (Agents rarely wore old uniform except for specific occasions, but new uniform wear is compulsory.)

February 13, St. Louis, Coronado Hotel: Ted Butler of Springfield replaces Roberts as commissioner.
Mike C. Milonski hired as biologist.

March 1, Maramec Spring opens as intensive trout area.

March 20, Jefferson City: Commission okays trade with Ohio—one turkey for six Reeves pheasants.
Adopts new fish planting policy.

April 18, Jefferson City: Commission decides to sell property on State Street.
Towell presents a reorganization plan.

May 15, Jefferson City: Commission authorizes two-year lease for space in Farm Bureau Building on Missouri Blvd. Moved from Monroe Building July 1.

June 17, Branson: Commission approves reorganization plan: creates Personnel Section (Ray Wells, personnel officer); assigns Education to Field Division; Information to Director's office; Kenneth Hicks, Field Services coordinator; Paul Q. Tulenko to be federal aid coordinator. Charles "Ted" Shanks to be chief of Game Section.
Approves lakes in Chariton and Texas counties.
Establishes two new farm forestry projects; total of 14.
Jerry J. Presley hired as forester.

July 10, Bismarck, North Dakota: Pippin absent. New officers are Cash chairman, Pippin vice-chairman, Butler secretary, Briggs member.
Department moved from Monroe Building and other offices to Farm Bureau Building on Missouri Blvd.
Ross E. Stones donates first fishing access on Big Piney River (Ross Access).

August 14, St. Joseph, Roubidoux Hotel: Director Towell gets 20-year service award.
Dean Davis Area lake still leaking. Commission seeks study.
Adopts pregnancy policy: must resign at five months without leave. May return if there is an opening.
Limit of 30 crappie to be restored in 1959.

September 18, Jefferson City: Trapper Lewis J. McIntosh retires.
Commission eliminates Deer Run as refuge, open to hunting.
Purchases 3,208 acres that became Schell-Osage area.
Re-employs Carl Noren as biologist. Assigned to river basin work and stream access program.

November 19, Brookfield, Bel Air Motel: Commission enters into agreement with Knox County group that led to Sever Wildlife Area.
Accepts 1,134 acres near Warrenton as Reifsnider State Forest.
Approves purchase of Lozier farm, to become Charles W. Green Experimental Wildlife Area.
Federal pleasure boating act discussed; Commission feels the Department cannot provide enforcement.

December 18-19, Jefferson City and Columbia: New Shepherd of the Hills Hatchery to open Jan. 1; will abandon Sequiota Hatchery. Guy

Berry new hatchery superintendent.
Commission authorizes building laboratory facilities at Little Dixie.
Twenty-five year service awards to Montie Glover, Vernon Bennett, M. K. Chapman, A. George Morris and Guy Berry—all holdovers from old Game and Fish Department.

1958 Summary: 1958-59 budget, $5,218,000.
One thousand miles of multiflora rose continue to be planted annually; 10 million trees and shrubs.
Swan Lake public hunting begun, also Upper Mississippi and Wappapello.
Stream access program begun.
Emphasis switched from deer to turkey restoration.
Department moved from Monroe Building to Farm Bureau Building.
Hunter Safety training program begun.
Schell-Osage, Diggs areas, Sterling Price, Austin, Ripley County community lakes, Reifsnider State Forest acquired.
1958 gun deer season: Nov. 17-22; archery Oct. 1-Dec. 15.

1959

January 27, St. Louis, Coronado Hotel: Commission split two-to-two on opening turkey season.
Regulations Committee now consists of assistant director as chairman, Game, Fisheries, Field and Protection chiefs; assistant state forester-timber management; legal counsel *ex officio* member.

February 18, St. Louis, Coronado Hotel: Lake Paho reclassified a community lake, fee dropped.

March 24, Jefferson City: Commission drafts letter to Senator Stuart Symington supporting in principle Ozark National Scenic Riverways.
Authorizes acquiring land at Taberville for prairie chicken preservation.

April 18, Jefferson City: Dr. G. B. Herndon, Fisheries chief, retires.
Commission promotes P. G. Barnickol to Fisheries Section chief, effective May 1.

May 8, Commission opposes Senate slashing $11 million appropriation budget request to $4 million. (Later restored).
Giant Canada geese at Trimble adopt wash tub nests.

May 22, Kansas City, Holiday Inn: Formal dedication of James A. Reed Memorial Wildlife Area, May 23.
Commission hires Robert King as conservation agent, effective July 1.
Willard Barbee, manager of Busch Area since 1947, resigns to join Nebraska Commission.
Mike Milonski reassigned from Swan Lake to Busch Area.

May 29, Five new community lakes open to fishing: Vandalia, Tri-City, Miller, Ray County, Worth County.

June 25, Jefferson City: Commission promotes John L. Funk to superintendent of fisheries research.
Approves new dam at Bennett Spring to replace one destroyed by flood.
Approves exhibit building at Springfield Fair.
Promotes Osal B. Capps to associate state forester in preparation for White's retirement Jan. 1.
Floyd Larsen promoted to chief engineer replacing J. Warren Smith, who resigned.
Nature Knights Program concluded.

July 23, Jefferson City: Frank P. Briggs reappointed as commissioner for a third term. Ewart H. Burch appointed to Commission, replacing Pippin.
New officers are Briggs chairman, Butler vice-chairman, Burch secretary, Cash member.
Commission approves building airplane hangar.
Authorizes transfer of Sequiota Hatchery to city of Springfield.
M. LeRoy Heman hired as area assistant.

August 13, Jefferson City: Commission establishes $5 turkey hunting permit, anticipating 1960 spring season of three days, April 27-29, in 14 counties. Estimates 3,000 hunters and a harvest of 60 birds. (Butler opposed.)
Approves trading 15 *talischensis* pheasants and 15 wild turkeys with Ohio for 60 wild-trapped ruffed grouse. (Beginning of grouse restoration program; 20 went to Boone State Forest and 40 to University's Ashland area.)

September 17, Clearwater, Florida, Ft. Harrison Hotel: Commission accepts donation of 120 acres from city of Wellsville.

October 1, New movie, *The Story of the Mourning Dove*, released.

October 31, Point Lookout, School of the Ozarks: Formal dedication of Shepherd of the Hills Hatchery.
New agent Robert King assigned to Scotland/Knox counties.

December 4, Construction starts on new dam at Bennett Spring.

December 11, Fisheries biologist Charles Purkett explains carp invasion of Current River system.

December 16, Jefferson City: Schwartzes present copies of *Wild Mammals of Missouri* and W. O. Nagel presents copies of *Cy Littlebee's Guide to Cooking Fish and Game*, both newly published.
Commission approves 158-acre Henry Sever Lake in Knox County.
Osal B. Capps promoted to state forester Jan. 1.
Missouri's second state forester, George O. White, retires.
Lee C. Fine named fire control chief, replacing Capps.

1959 Summary: Deer Ridge, Sever wildlife areas and Taberville Prairie acquired.
Table Rock Lake impounded 1959.
Rabbit harvest in 1959 at all-time high with estimated six million taken by hunters.
1959 gun deer season: Nov. 16-21, entire state open for first time. Archery season Oct. 1-Dec. 15.

1960

January 28, St. Louis, Mayfair Hotel: Court rules Department cannot require fishing license on fee fishing lakes.

February 18, St. Louis, Mayfair Hotel: Butler absent. Licking Nursery formally renamed "George O. White Nursery."
David D. Hurlbut hired as forester.

March 24, Jefferson City: Cash absent. Department embarks on emergency feeding program due to heavy snows. Fish dying in ponds because of snow cover; 44 inches of snow fell at Jefferson City between Feb. 20 and March 20.

April 20, Biologist Charles A. Purkett Jr. observes paddlefish spawning for the first time; collects eggs and pro-larvae.

April 23, Jefferson City: Commission approves three-day archery deer hunt at Knob Noster State Park.

April 27, First turkey season in 23 years opens; three half-days in 14 counties; 94 birds harvested.

May 19, Jefferson City: Commission approves class of 12 new conservation agents.
Enters agreement with University of Missouri on operation of Gaylord Laboratory at Duck Creek Wildlife Area.

June 14, Jefferson City: Commission hires Charles E. Hooker as engineer.
Upland Game Program expanded with Mike Milonski as head. New program consists of extension wildlife management, acquisition of lands, ponds for wildlife.

July 12, Jefferson City: New officers are Butler chairman, Burch vice-chairman, Cash secretary, Briggs member.
James P. Fry hired as fisheries biologist.
Indian Trail dropped as refuge, made state forest.

August 22, Sam Baker State Park: Commission approves trade with Ohio; 15 turkeys, or 10 turkeys and 15 to 20 *talischensis* pheasants, for 60 ruffed grouse. All grouse to Daniel Boone State Forest.

October 5-6, Jefferson City: Commission okays first archery deer season at Busch Area.
Director ordered to look into trapping quail in south Missouri and releasing in north, also to release smallmouth bass fry and stock experimentally.

1960 Summary: Stocked 30 million fish in 10,000 ponds and 1,200 lakes.
Paddlefish eggs and larvae discovered.
Commission approves first full seven-day gun deer season: Nov. 15-21; archery season Oct. 1-Dec 15.
1960 turkey season Apr. 27-29 in 14 counties.
Less than 1 percent of protected forest area burned.
Over 11 million trees and shrubs produced.

1961

January 12, St. Louis, Mayfair Hotel: Commission issues statement against quail stocking.

Expert says Dean Davis Lake won't hold water unless expensive clay blanket is put down. Commission orders further study.

Rabbit season shortened to close Jan. 31 due to heavy snows.

February 21, St. Louis, Bel Air Motel: Pippin reappointed as commissioner to replace Briggs who went to U. S. Department of the Interior as assistant secretary for fish and wildlife.

State Street property sold for $35,000 to Theo Vollmar of St. Louis.

Commission decides to hold on to Dean Davis Lake as wildlife area, with reduced volume lake.

Passes resolution honoring Briggs for long service.

March 22, Kansas City, Muehlebach Hotel: Department releases 105 bamboo partridges in Scott and Pemiscot counties.

April 15, Columbia, Research Office: Director proposes policy statement on Ozark National Scenic Riverways, but decision is deferred. (Commission wants assurance hunting, timber harvest will be allowed. Land donation considered.)

Department to take over distribution of permits in St. Louis and Jackson counties, Jan. 1963.

April 24, Conservation Agent Glenn McCormick fatally shoots man who attacked him with rifle on remote forest trail.

May 12, Bennett Spring State Park: Legislature turns down power plant site for Department headquarters site.

Commission okays trade with Ohio of 15 turkeys for 60 grouse.

Legislation proposed to set up joint legislative committee to approve all regulations of all state departments. Commission opposes.

May 19, Biologist Tom Russell and Hatchery Manager Jerry Hamilton succeed in hatching paddlefish eggs at Bennett Spring Hatchery. First time known to science.

June 3, *Conservationist* magazine named most outstanding in nation by Association for Conservation Information.

June 14–15, Jefferson City: Branson Hatchery, conveyed to Fish and Game Department in 1929 and abandoned by Department in 1954, is conveyed back to White River Lakes Association.

July 1, Sterling Price, Austin, Ripley and Jo Shelby community lakes open.

July 19, Jefferson City: Ben Cash reappointed as commissioner for a second term.

New officers are Burch chairman, Cash vice-chairman, Pippin secretary, Butler member.

Commission okays buying 42.27 acres on North Ten Mile Drive from Dulle heirs for $84,540, to be paid in three installments. Offers to sell half to Highway Department for building site if they want it.

Allows hunter to take deer by both gun and archery. (Previously only one deer per year by any method.)

Malcolm K. Johnson hired as publications editor.

August 23, Jefferson City: C. W. Schwartz produced seven TV shorts on good outdoor manners.

Butler says Conservation Federation is dissatisfied with Commission and invites them to a conference. (The meeting did not take place until 1962.)

October 4, Agent Supervisor Rolla B. "Jack" Wallace and Agent Robert Shaunce seriously injured in car crash while pursuing deer poachers.

October 26, Osage Beach, Tan-Tar-A Resort: Conservation Federation asks for meeting without director, assistant director or Federation executive secretary present. Commission insists they be present.

Commission buys 42-acre site for new headquarters.

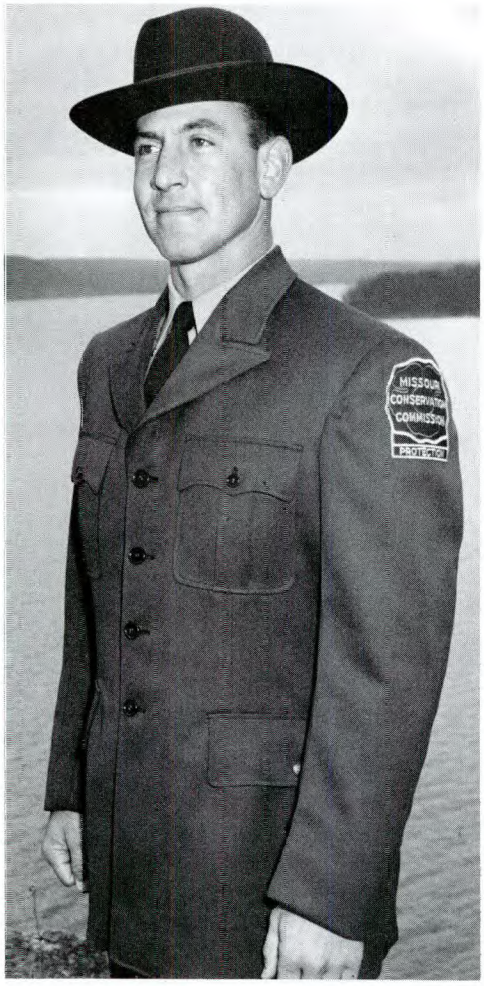
M. LeRoy Heman promoted to area manager I.

November 14, Washington, Mo. Ralston-Purina Lodge: Paul G. Brooks, training officer, transferred to Ozark District replacing Wallace; Earl Coleman promoted to training officer.

Commission okays use of prisoners at Fordland Camp to do conservation work.

December 18, Jefferson City: Commission promotes Allen Brohn to position in charge of





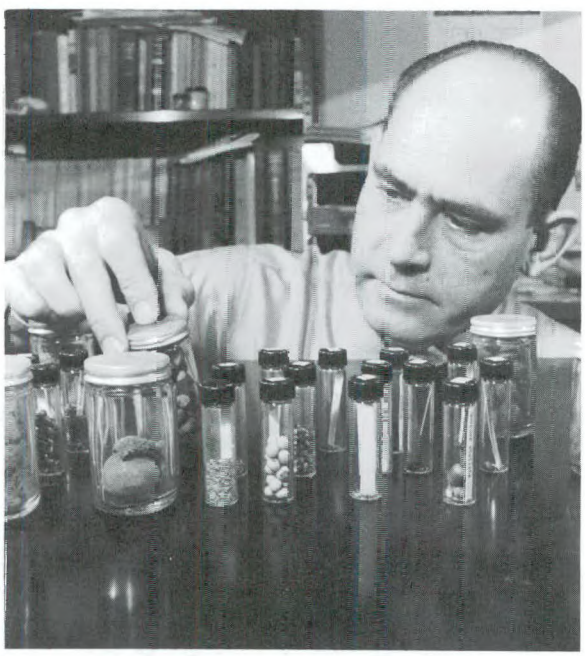
The articles of Werner O. Nagel, above left, and editorials of Dan Saults, right, made them among the chief Department spokesmen during the decade of 1947 to 1957. Agent Roger Biesemeyer, right, models the uniform worn by agents from 1958 to 1970. Below, dignitaries gathered in October, 1957, for the dedication of Gaylord Laboratory on Duck Creek Wildlife Area near Puxico. Ducks Unlimited donated funds for construction of the wildlife laboratory in honor of Commissioner Clifford W. Gaylord.







Biologist August Artus began his career in the wildlife cover restoration program. In 1954, Artus and Lewis Helm were sent to Canada to band waterfowl.



A casting pool, top photo, was a popular feature of the State Fair for many years. Department personnel coached angling novices in casting techniques. Leroy Korschgen, above, researched wildlife food habits.

planning and special programs for Game Section.

Lee C. Fine promoted to assistant state forester-fire control.

Promotes John E. Wylie to assistant state forester-timber management.

Dr. F. Olin Capps resigns to accept education post with Fish and Wildlife Service.

1961 Summary: Pony Express, Atlanta, Pleasant Hope, Wellsville Lake, Honey Creek, Osage Prairie, Huckleberry Ridge, Neeper areas acquired.

Pomme de Terre Lake impounded 1961.

1961 gun deer season: Nov. 15-21; archery Oct. 1-Dec. 15.

Turkey season Apr. 26-28 in 14 counties.

1962

January 1, Statewide trout permit required for first time for areas stocked with trout outside the four trout parks.

January 24-25, St. Louis, Coronado Hotel: Commission approves plans for 25th anniversary: special "Conservation Day" at the State Fair; a "Commissioners' Dinner" honoring all former commissioners, employees with the Department from the beginning, former presidents of the Federation; special display at Fair pavilion; signs on all Department areas; special silver anniversary letterhead; special edition of the *Conservationist*; a picnic for all employees.

Commission conducts an open meeting to discuss proposal for rabbit hunting on Busch Area; Gale explained the biology, Area Manager Fred Anderson explained the procedures to be used. Public invited to comment. Field trialers oppose, others favor.

Werner O. Nagel wins American Motors Conservation Award.

February 22, St. Louis, Statler Hotel: Commission authorizes use of falcons, effective March 7.

Clarence Billings promoted to superintendent of Education, replacing F. O. Capps.

February 25, Commission met with Conservation Federation Board members at Governor Hotel in Jefferson City. Talk apparently cleared the air between two parties. Commission anxious not to be dictated to by Federation. (There was probably personal friction between Ed Stegner and William Towell at base of problems, it was concluded.)

March 21, Jefferson City: Commission tells director to keep Federation posted on Commission activities, establish closer liaison.

Purchases 448 acres at Brickyard Hill for $26/acre.

Okays erection of two steel quonsets on headquarters property.

April 27, Jefferson City: Commission okays construction of deep well at Shepherd of the Hills Hatchery in order to provide warmer water for fish.

May 4, Gov. John Dalton proclaims May 4 first "Fishing Day in Missouri." This was to become an annual event for many years.

May 23, Kennett: Commission okays continued trade with Ohio—15 turkeys for 60 grouse.

June 25-26, Jefferson City: New officers are Cash chairman, Pippin vice-chairman, Butler secretary, Burch member.

Commission establishes two new Protection Regions (north-central and central) and changes Field Service districts.

Charles E. Hooker promoted to assistant chief engineer.

August 9, Jefferson City: Butler absent. Commission presents Harold V. Terrill with 25-year service award; he is first employee of Department to receive it.

Approves trading five turkeys for 20 grouse with Indiana.

R. A. Brown criticizes 25th anniversary issue of *Conservationist* for lack of mention of Conservation Federation. (Commission bitterly resented letter he wrote.)

Vernon E. Sievert hired as fiscal officer (Jan. 1, 1963) replacing Montie Glover who retires July 1, 1963.

Protection extended to all hawks, bobcat put on sport list.

October 12, Department, U. S. Fish and Wildlife Service and University of Missouri to start fisheries research unit.

October 23, Brookfield, Brownlee-More Bank: Earl Hoyt and Owen Jeffery demonstrate ef-

fectiveness of slingshot in taking game. Approval is deferred.
Thirteen new agents assigned.

November 7, Washington, Mo., Ralston-Purina Lodge: Commission authorizes cooperation with U. S. Fish and Wildlife Service in starling control studies in northwest Missouri.

December 7, Jefferson City: Director asks to hire architect to plan building. Pippin and Burch for, Cash and Butler against.
Commission opens Wappapello to commercial fishing.

1962 Summary: Since 1944 the Department has assisted in 138,484 ponds of more than eight feet depth that farmers built; has stocked 52,570 lakes and ponds.
Conservationist circulation at 150,000.
Department has built accesses on five rivers.
Sears Lake, Nodaway Lake, Bennitt, Hungry Mother, Brickyard Hill wildlife areas acquired.
1962 gun deer season: Nov. 15-21; archery Oct. 1-Dec. 15.
Turkey season: April 22-25; Stone, Taney and Jefferson counties added.

1963

January 7, St. Louis, Mayfair Hotel: Stan Green, president of Missouri Bowhunters, reports to Commission on allegations that an archer killed a bull. Green states that incident occurred in Arkansas. Green asks for rule that deer may not be shot in the water.
Fish and Wildlife Service asks cooperation in starling problem in Dexter. Commission defers action.
U. S. Forest Service asks that a forester be assigned to Meramec Watershed Study; Gene Brunk assigned.

January 29, Roosevelt "Rose" Holland, popular Montauk Hatchery superintendent, dies of heart attack.

February 7, Kansas City, Muehlebach Hotel: Fish and Wildlife Service asks to use TEPP, a deadly poison, on starlings at Dexter. Commission gives reluctant approval; poison was not used.

March 14, Jefferson City: Commission okays trade with Indiana: 20 turkeys for 80 grouse.

April 3, Commission opposes Gasconade River dams at Richland and Arlington.

April 15, Gov. John Dalton says Conservation Department and Park Board now favor Ozark National Scenic Riverways.

April 19, Jefferson City: Commission commends Schwartzes and Keefe for awards won by film, *This is the Mallard.*

May 19, Branson, Highway K Boat Dock: Commission discusses pros and cons of open meetings. Butler and Cash are for open meetings. Pippin and Burch tentatively agree, but Towell opposes. Hammett to check on this "unofficially." (See July)
Approves purchase of Big Buffalo Creek Experimental Area, 1,436 acres.

June 17, Dr. Richard Anderson named head of cooperative fishery research unit at University of Missouri.

June 25-26, Jefferson City: Legislature passes budget bill that includes new Department building.
Floyd C. Larsen, chief engineer, retires.

July 1, Sever Lake in Knox County is dedicated.

July 24, Jefferson City: New officers are Pippin chairman, Butler temporary vice-chairman, Burch secretary, Cash member. Butler's term had expired.
Commission presents retirement plaque to Montie Glover for 27 years of service with Department, four with Fish and Game Department.
Gives 25-year service awards to William E. Towell, J. Lewis Berrey, H. Reed Frisbie, Kenneth R. Hicks, Francis J. Mertens, Robert H. Price, Roy N. Tomlinson, A. Reed Twichell.
Executes contract with Hellmuth, Obata and Kassebaum to design building. Not to exceed $980,000 (expect to get $750,000 in Accelerated Public Works Funds from federal government.)
Federal government wants missile site at Schell-Osage, but does not want hunting near it. Commission offers to sell site for $5,000; federal government offers $1,895 or threatens to condemn. Commission stands firm.
Attorney General can find no law pertaining to open meetings. Commission decides anyone

may attend, but if sensitive matter comes up, will be asked to leave.

Charles E. Hooker promoted to chief engineer, replacing Floyd Larsen, retired.

August 14, Jefferson City: William R. Tweedie Sr. replaces Ted Butler as commissioner; named vice-chairman.

Commission okays slingshot for small game in 1964; reaffirms ban on non-resident turkey hunting.

Kokanee trout stocking at Taneycomo begun.

September 11, Minneapolis, MI, Pick-Nicollet Hotel: Commission approves $20,000 as part of state's exhibit at New York World's Fair.

Establishes three-day archery deer season at Caney Mountain, Nov. 11-13, to reduce deer herd.

Donald K. Heard hired as education advisor.

David D. Hurlbut rehired as forester.

Lee C. Redmond hired as fisheries biologist.

October 29, Water drop used successfully for first time on state land forest fire near Neelyville.

November 7, Washington, MO, Ralston-Purina Lodge: Gov. Dalton, John Paulus (Division of Design and Construction chief) and Commission approve Hellmuth, Obata and Kassebaum as design firm for building.

"Every Sportsman a Firefighter" campaign. Hunting to open on schedule despite high fire danger.

Department's twin Beechcraft plane okayed to accompany Spirit of St. Louis to N. Y. World's Fair to carry newsmen, photographers.

Towell suggests plaques to former commissioners and Mr. Bode. Approved.

Highway Department agrees to review its plans for possible fishing access sites.

December 8, St. Louis, Mayfair Hotel: Edwin Glaser transferred and promoted to director's office as liaison between Department and Bureau of Outdoor Recreation, effective Jan. 1. (Creation of Planning Section, which included Carl R. Noren.)

1963 Summary: Lake Girardeau, Sims Valley, Anderson, Prairie Home areas acquired.

Conservationist circulation at 167,000.

1963 gun deer season: Nov. 15-21. Permit use of pistols .38 cal. and larger; may not shoot deer in water.

Statewide "any-deer" season for archers for the first time, Oct. 1-Dec. 15.

Turkey season: Apr. 22-25 in 19 counties.

1964

January 21, Springfield, Coach House Inn: Jerry Presley promoted from district forester to Central Office, replacing Ed Glaser.

Acquires historic Blue Spring on Current River.

February 22, Jefferson City: Special one-year daylight gigging season, July 10-Oct. 10, for Eleven Point River, at suggestion of Judge Gordon Dorris *et al.*

March 26, Jefferson City: Jeanne Hanson promoted to administrative secretary, replacing Helen Cooper who resigned.

J. F. Keefe suggests reactivating Master Conservationist Awards. Decision deferred.

Assistant Director Dan Saults resigns to go with Bureau of Land Management in Washington.

Gale appointed Regulations Committee chairman.

William Gusey of Fish and Wildlife Service wants to dynamite a blackbird roost in Carroll County. Permission denied.

Commission approves reorganization of Department: Larry R. Gale named assistant director-line, with Fish, Game, Forestry and Field divisions. Purkett chief of Fisheries, Shanks chief of Game. Paul G. Barnickol named assistant director-staff, with Information, Personnel, Fiscal, Engineering, Planning, Metropolitan Offices and newly created Operations Section. Robert F. Wells named Operations officer.

Approves five access points, bringing total to 26.

April 21, Jefferson City: Imelda Scheppers promoted to Gale's secretary, Terry Hunter to Barnickol's secretary.

Alport Construction Co. of St. Louis awarded contract to construct headquarters office building.

Approves construction of Thomas Hill Dam by Associated Electric Cooperatives.

July 22, Jefferson City: New officers are Tweedie chairman, Burch vice-chairman, Cash secretary, Pippin member.

Commission retains commercial fishing at Wappapello one more year.

Okays architect to design fair building for Cape

Girardeau; Southeast Fair Association to pay for construction.

Purchases 1,920 acres at Ft. Crowder for $22.50/acre.

Reluctantly approves missile site easement at Schell-Osage for $1,895; closed to hunting.

August 25-26, Jefferson City: Cash absent. Adopts policy of opening lakes Jan. 1 of second year following stocking instead of July 1. (Result of opening day disaster at Little Dixie Lake when anglers removed almost all bass.)

Approves special archery deer hunt, Oct. 28-Nov. 1, at Caney Mountain.

Public presses for closure of commercial fishing at Wappapello.

Fred Rodman named to oversee headquarters construction.

Okays trade with Indiana of 20 turkeys for 80 grouse.

September 24, Jefferson City: Pippin absent. Dru L. Pippin resigns from Commission.

Commission presents 25-year service awards to Dillard Branson, Paul G. Brooks Sr., Riley Gladden and John Leonard Rowe.

Purkett, Keefe ask about entering a tagged fish scheme with Anheuser-Busch, where anglers would collect prizes for catching fish tagged by Department personnel. Decision deferred.

October 29, Jefferson City: August A. Busch Jr. replaces Pippin.

Towell proposes differentiating between Commission and Department on public records. Referred to legal counsel for study.

Okays purchase at $5/acre of University of Missouri Ozark lands.

November 9, George O. White, first state forester, dies of heart attack.

November 24, Jefferson City: Attorney Hammett says differentiation can occur between Commission and Department in some matters. Commission asks attorney general's opinion.

December 18, Jefferson City: Cash absent. Commission gives Edgar Biffle 25-year service award.

Enters agreement with Southeast Missouri Fair on building lease for 25 years.

Okays agreement with Central Missouri State University to give conservation agents completing training 20 hours of college credit.

1964 Summary: Farm forestry and timber management replace fire fighting as forestry focus.

Now have accesses on nine rivers.

Acquisitions: Neeper, Big Buffalo Creek, Little Prairie, Ben Cash, Marshall Junction wildlife areas.

Conservationist circulation 162,000. Commission approves 12 four-color covers for 1965.

1964 gun deer season: Nov. 13-19 in 94 counties; archery Oct. 1-Dec. 15.

Turkey season: Apr. 22-25. Includes a Saturday for first time. Add Warren, Montgomery and Pulaski counties.

1965

January 26, Afton, Grant's Farm: Two new lakes on Busch Area opened to "fish for fun" for 15 days (artificial lures, return all fish) to see if it would serve as a break-in period and prolong good fishing.

Commission promotes Kerwin Hafner to assistant state forester-fire control, replacing Lee C. Fine, who resigned to become Director of Parks.

March 4, Jefferson City via phone: February meeting canceled due to weather.

Commission okays two friendly condemnation suits to clear titles.

March 31, Kansas City: Attorney general says Commission cannot change name to Department of Conservation because Gov. Donnelly put Conservation Commission, State Park Board and Moses Austin Memorial within a State Department of Conservation in June, 1946.

Reed Twichell and Allen Brohn named federal aid coordinators.

Commission okays construction of Binder Lake at Jefferson City.

April 24, Jefferson City: New headquarters building progressing; completion expected by August 1.

Three new lakes at Reed Area are to have certain arms closed to fishing to aid in break-in.

Passes resolution on death of Regional Supervisor Riley Gladden (died Apr. 12.)

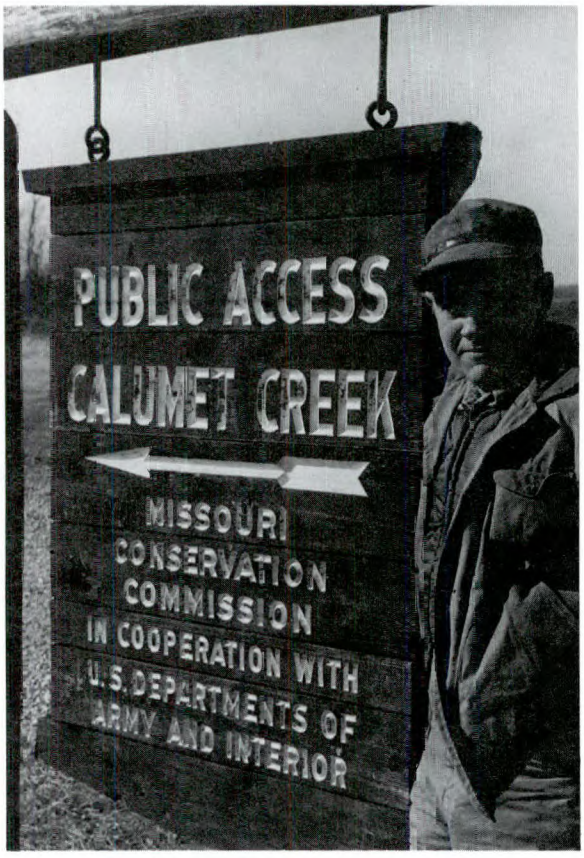
May 19, Jefferson City: Paul Tulenko devotes two-thirds of his time as landscape architect for new building; retiring as federal aid coordinator July 1.

Fifteen agent trainees approved, including Sam Kirby.





Kansas City Metro Coordinator Dick Rotsch, top left, confers with Harold Ensley, right, before taping Ensley's TV show. The old Farm Bureau building, below, housed staffers Mike Milonski, Charles Purkett, Paul Tulenko, Margaret Davis, Allen Brohn, Larry Gale, Werner Nagel, Dunbar Robb and Harold Terrill.



Larry Gale and an access acquired in 1963.



Wildlife Biologist Dean Murphy studies deer jaws to ascertain age in 1957.



Fred Castor, Camdenton towerman, takes a reading on an Osborne fire finder in the mid-1960s, above. Below, survey crew chief John Hirschman, right, and an aide conduct a land survey in 1964.



Paul G. Barnickol was the third fisheries biologist employed by the Department. He worked on pollution problems, later served as research chief; he eventually became chief of Fisheries and an assistant director before his untimely death in 1976.



June 26, St. Louis, Busch Stadium: Two new commissioners (effective July 1) sat in—Blair and DeLaney.

Commission sets plans for new headquarters dedication Oct. 1.

Ten shell limit adopted for Swan Lake Area.

David Hurlbut promoted to assistant Operations officer.

Dan F. Dickneite hired as area assistant.

Redman Wildlife Area declared a refuge to aid prairie chickens.

Conservation Agent Harry Feltz promoted supervisor East-Central Region, replacing Riley Gladden.

July 16, Jefferson City: Robert G. DeLaney replaces Burch, Jim Tom Blair replaces Busch as commissioners.

New officers are DeLaney chairman, Cash vice-chairman, Blair secretary, Tweedie member.

Association for Conservation Information Awards: firsts for news program, movie *A Place to Live*, extension project, "Educating George," miscellaneous publications, *Facts, Fancies and Folklore* and *This is Your Conservation Commission*; third place, radio and television programs.

July 26, *Missouri Ozark Waterways* by Oz Hawksley is published by Department.

August 27, Jefferson City: Department moves into North Ten Mile Drive headquarters.

Conflict arises with state comptroller on out-of-state travel. Commission declares that it will approve out-of-state travel, not the comptroller; vows to go to court if necessary.

September 30, Jefferson City: Commission gives 25-year service awards to Lyman J. Chronister, A. A. "Jack" Frost, C. W. Schwartz, Alton P. Robinson, Paul Q. Tulenko.

Approves a Busch Brewery fish tagging and stocking program; the three-year program requires Busch to pay Department $20,000 for first year, $14,000-$16,000 the next years.

Okays trading 5 turkeys to Iowa for 20 grouse, and 15 turkeys to Indiana for 60 grouse.

October 1, Department "open house" at new headquarters.

October 27, Chillicothe, Shamrock Motel: Former Director I. T. Bode wrote to thank Commission for making it possible for him to attend the dedication ceremonies.

Commission assigns 14 new agents: transfers Sam Kirby to Adair County.

Retiring Legal Counsel Aubrey Hammett's last meeting.

November 23, Jefferson City: Commission hires Julian O'Malley as new attorney.

Problems continue with inflation and salaries. Prices of materials and operations exceeding budget, employees resigning.

December 4, Busch Wildlife Area special meeting: Atomic Energy Commission wants 2,200 acres of land from Busch Area for accelerator site. Commission says it is available at no cost in the public interest, but would seek reimbursement. (This never came to pass.)

1965 Summary: Binder Lake, Danville, Fort Crowder wildlife areas, and Fourche Creek, Leadmine state forests acquired.

Thomas Hill Reservoir impounded 1965.

1965 gun deer season: Nov. 15-21; archery Oct. 1-Dec. 15.

Turkey season Apr. 27-30 in 25 counties.

1966

January 19, St. Louis, Bel Air East Motel: Commission okays trade with Iowa, 20 turkeys for 80 grouse.

Gov. Hearnes wants to test authority of Commission; would like to exert same budget control as over other departments. Towell feels governor wants a court test and hopes commissioners can head this off. DeLaney and Blair to talk to governor.

Bailey asks for 30 new agents and three new districts. Action is deferred.

April 16, Jefferson City: Tweedie absent. Commission approves six new conservation agent positions, raising strength from 114 to 120 agents.

Moreau River/Highway 50 access approved. This is the first access under agreement with Highway Department, entirely on Highway Department land.

May 26, Jefferson City: Commission authorizes Department to take over wildlife management of Thomas Hill Lake.

Employees invited to union organizational meetings; Commission adopts position that employees may join any union they wish.

Muskie fry (51,000) released in Pomme de Terre Lake.

June 23–24, Jefferson City: Department sends eight turkeys to Fort Knox in Kentucky to complete stocking begun last winter.

July 22, Jefferson City: New officers are Cash chairman, Blair vice-chairman, Tweedie secretary, DeLaney member.

W. O. Nagel re-assigned to work on *Conservation Contrasts.*

ACI awards: first in black and white photography, *Conservationist* magazine and miscellaneous publication, "The Long Look."

Comptroller refuses to honor salary increases, so regular payroll is sent and attorney general's opinion sought. If he stalls or rules against the Department, Commission will go to court.

Commission approves trade with South Dakota: 100,000 catfish fry for northern pike fry to stock in Wappapello and Thomas Hill.

August 17, Jefferson City: Commission okays drawdown at Wappapello, allows six commercial fishermen to remove rough fish.

Initiates put-and-take catfishing at Reed Area.

September 13, Kansas City, Muehlebach Hotel: Attorney general's opinion reportedly written but not released. Rumor says it's favorable.

Commission presents 25-year service awards to James L. Bailey, Dorris W. Frazier, Paul B. Johnson, A. R. Mottesheard, Hugh F. Pritchard, Bill T. Crawford, Dunbar Robb, Raymond L. Woodring.

William Clark, chairman of the Public Service Commission, threatens Towell and Department over a game law arrest. Commission stands firm.

Sam Kirby promoted from agent to area assistant.

October 16, Eminence, Forestry Headquarters: Michael Milonski promoted from Upland Game Program to waterfowl supervisor.

Fish and Wildlife Service expresses concern that Department has no blacks on staff; recommends employing a compliance officer to determine if it is discriminating. Towell says Department will make every effort to recruit blacks, but will not practice reverse discrimination.

October 29, Two Department biologists, Don Christisen and Bill Crawford, instrumental in formation of Missouri Prairie Foundation.

November 16, Brookfield, Securities State Bank: Tweedie absent. Director William E. Towell submits his resignation, effective Jan. 1, to become executive vice-president of the American Forestry Association.

Commission approves construction of a training building.

Buys one million striped bass eggs from South Carolina for stocking in Lake of the Ozarks; raised at Union Electric Hatchery.

Releases 51,000 muskie fingerlings in Pomme de Terre.

Attorney general opinion regarding salary increases still not available; DeLaney threatens to seek writ of mandamus to force action.

December 20, Jefferson City: Commission calls special meeting to interview candidates for Towell's replacement. They are Charles E. Shanks, Carl R. Noren, Allen Brohn, Edwin H. Glaser, Charles A. Purkett, P. G. Barnickol, Dunbar Robb.

December 21, Jefferson City: Tweedie absent. Commission formally accepts Director Towell's resignation.

Attorney general rules comptroller did not have authority to withhold salary increases; Commission is not directly under the control of the governor.

Governor Hearnes wants to put Boat Commission under Conservation Commission; O'Malley believes this must be accomplished with an amendment to the constitution.

Twenty-two conservation agent trainees approved.

Commission approves a management plan for Stockton Reservoir, currently under construction.

Conducts more interviews for director: Larry R. Gale, Floyd Stewart, Richard H. Rotsch, Ed Stegner, Vernon Bennett, Bill T. Crawford. Gale, Bennett and Noren recalled for consultation. Then Cash, Blair and DeLaney voted for Carl R. Noren as director, effective Jan. 1, 1967. Tweedie advised by phone later.

1966 Summary: Budget for 1967-68 is $7,403,298.

Towell resigns, Carl R. Noren becomes director.

Twenty-three upland game areas have been acquired, 42 river accesses.
There are currently 180,000 acres in state forests.
Farm forestry service now available in 100 counties.
Acquisitions: Blind Pony, William Logan wildlife areas.
1966 gun deer season: Nov. 12-Nov. 18; archery statewide, Oct. 1-Dec. 15.
Turkey season: April 26-30, in 29 counties including four news ones: Bollinger, Butler, McDonald, Morgan.

1967

February 14, St. Louis, Clayton Inn: Tweedie absent. A. R. Mottesheard to be transferred from School of the Ozarks to Columbia, effective July 1.
Permit "seconds" being sold by printer's employees.
Salaries not keeping pace with inflation, employees leaving.

March 12, Film *Headwaters* wins national honor at North American Wildlife Conference.

March 13, Jefferson City special meeting: Commission discusses salary problems; tentatively approves increases of 5 to 25 percent.

March 17, Jefferson City: Commission authorizes deeding Elephant Rocks Area to state parks; originally donated by Dr. and Mrs. John S. Brown.
Staff asks for 15 percent salary increase.

April 21, Jefferson City: Blair absent. Don Cullimore, executive director of Outdoor Writers Association of America, presents award for *Headwaters* film to Charles and Elizabeth Schwartz and J. F. Keefe.
Legislature considers fixing fees for permits and repealing penalties for wildlife violations. Commission appeals to the people to prevent this.

May 8, Jefferson City: Former Director I. T. Bode's wife, Berenice, died; Commission sends expression of sympathy.
Commission approves planning for research building in Columbia.
Okays agreement with City of Jefferson on Binder Lake/Park. Department to retain ownership of lake bed to elevation 644 feet, plus area below dam.
Twenty new conservation agents assigned.

June 28, Jefferson City: ACI first place awards in miscellaneous publication, "Inventory 66;" *Conservationist* magazine; film *Headwaters*; over-all Information programs and exhibits.
Commission extends employment of Paul Tulenko as landscape architect to June 30, 1968 to compensate for time lost due to health problems.
Okays 25-year lease with Union Electric to manage reservoir at Taum Sauk Power Station in Reynolds County.
Promotes Harold V. Terrill to staff specialist to do habitat research, effective Jan. 1.
A. Reed Twichell promoted from biologist III to staff specialist/federal aid coordinator, effective July 1.
James P. Fry promoted to biologist III, replacing Twichell.
Lee Redmond promoted to replace Fry.
Donald Heard, educational consultant, resigned.

July 28, Jefferson City: William A. Stark replaces Ben Cash as commissioner.
New officers are Blair chairman, Tweedie vice-chairman, DeLaney secretary, Stark member.
Federation executive secretary Stegner says Department spends too much money on forestry; he feels Department should get general revenue money. Commission agrees and tells him to find ways to get it.
Popularity of trout feed vending machine at Shepherd of the Hills Hatchery prompts installation at other trout rearing facilities.

August 18, Bennett Spring State Park: Director Noren reads a letter of resignation from Commissioner Tweedie to Governor Hearnes dated August 16, 1967. (Tweedie had a brain tumor and died later that year.)
Commission tells staff to continue studying ways to obtain more forestry money from general revenue.

September 18, Branson, People's Bank: DeLaney elected vice-chairman and Stark secretary.
Commission discusses bear case: Bill Scott of Ellington killed a bear. Agent Tom May and Allen Brohn confiscated the hide and turned it over to University of Missouri. Prosecuting attorney William Bruce Jr. wrote Dr. Tom

Baskett asking for the skin back for Bill Scott. Warrants issued for Agent May, A. Brohn and T. Baskett. O'Malley directed to represent May, Brohn, Baskett.

Approves trade with Iowa: 20 turkeys for 225 pheasants.

October 19, Carthage, Memorial Hall: Lewis D. Linville replaces Tweedie as commissioner.

Sam Kirby transferred and promoted from area assistant to Field Service agent, Ozark District, effective Dec. 1, replacing Leonard Rowe, retired.

Commission approves construction of a warm water hatchery at Blind Pony Lake.

Passes resolution honoring Tweedie.

Stark says not to release confiscated bearskin except on order of the Commission.

November 16, Brookfield, Brookfield Banking Co.: Special meeting called to settle the Reynolds County bear case. Brohn says hide was retained in Wildlife Research Unit's collection at University of Missouri-Columbia.

Gary Camenisch promoted to assistant superintendent of hatcheries.

George Dellinger promoted from forest game habitat to supervisor of upland habitat management, replacing Terrill.

December 15, Jefferson City: Imelda Scheppers promoted from administrative secretary for Gale to administrative secretary for Noren and the Commission, replacing Jeanne Hanson, resigned. Terry Hunter promoted from secretary for Barnickol to administrative secretary for Gale; Josephine Radmacher transferred and promoted from Engineering secretary to administrative secretary for Barnickol.

Commission okays training class of ten conservation agents.

Commission getting public pressure for free permits for those over 65. Believes funds for free permits should come from general revenue as welfare.

1967 Summary: Ranacker Wildlife Area acquired.

1967 gun deer season: split, Nov. 18-22 in 63 counties, and 51 bucks-only counties, then Dec. 1-3 bucks-only. Archery, Oct. 1-Dec. 15. First primitive weapons hunt: Caney Mountain, Oct. 21-29.

Turkey season: April 24-30; non-residents allowed to hunt.

1968

January 18, St. Louis, Colony Motor Hotel: James P. Fry promoted to assistant Fisheries Division chief.

Parks Director Joseph Jaeger wants to terminate 1963 agreement with Department to jointly manage Hawn State Recreation Area due to complaints about hunting and timber cutting.

DeLaney orders director to look into a better field uniform for agents.

February 14, St. Louis, Clayton Inn: Controversial bear skin tanned and in Department possession. Commission directs Brohn and O'Malley to take skin to Bill Scott of Ellington to inspect and photograph; may be available for loan to him later.

Staff reports on public hearing in Carthage pertaining to gigging.

Moves Kansas City office from Grand Avenue to new State Office Building.

March 16, Charles E. "Ted" Shanks, Game Division chief, dies of heart attack.

March 26, Kansas City, Phillips Hotel: Commission adopts system of salary review and adjustment. Turnover in personnel is reduced from 12.8 percent to seven percent. Inflation continues and Commission okays an additional five percent raise in July.

Signs memo of understanding with National Park Service on management of Ozark National Scenic Riverways.

Designates Charity Lake at Brickyard Hill a community lake; it was built by local citizens.

More office space at headquarters already needed; Commission okays another building.

Okays agreement with University of Missouri Press to jointly publish new edition of *The Wild Mammals of Missouri*, first published in 1957.

Stanley M. Michaelson hired as fisheries biologist. Approves expanding fisheries management staff from three to six biologists.

Allen Brohn promoted to Game Division chief replacing Charles E. "Ted" Shanks who died March 16, and was buried at Fountain Grove Wildlife Area.

Presents Master Conservationist Award to R. A. Brown at Conservation Federation meeting April 20. Decides to reserve awards for outstanding conservation work only; will not make regular awards in future.

Biologist Glenn Chambers briefs Commission on exotic pheasant research.

April 19, Jefferson City: Kivett and Myers Construction Co. to design Columbia research building.

Commission reorganizes Protection Division: creates three districts in each region, creates post of "district supervisor," changes title from "superintendent of Protection" to "chief of Protection;" from "supervisor of hunter safety and equipment" and "training officer" to "assistant chiefs" and from "district supervisor" to "regional supervisor." (District supervisors were later phased out.)

Charles E. Hicks hired as superintendent of hatcheries effective June 15, replacing A. G. Morris who will retire Nov. 15. Mike Milonski promoted to superintendent of Game Management (new title), replacing Brohn.

Approves hiring two additional Game Management personnel.

May 17, Mexico, Air Park Motel: Director asks that an expert be hired to study Department, its programs, and how to acquire additional sources of funds. Commission approves. (This was beginning of *Design for Conservation.*)

Jack Greathouse of Hannibal suggests ten-shell limit at Fountain Grove. Commission takes no action.

Assigns eight new conservation agents.

Approves Protection Division reorganization. (See April.)

Dan Dickneite promoted to biologist II replacing Milonski.

Pressure continues for free fishing permit for elderly. (Gale says our rules are the most restrictive in the country as 40 states have special permit rules.)

June 20, Jefferson City: Blair absent. ACI awards presented: first place in radio and TV programs; second place in exhibits, overall Information program.

Commission orders articles on free permits be written for magazine; enlists help from Kansas City and St. Louis outdoor editors, too.

Starker Leopold agrees to do study of Department.

Creates a $3 trout stamp to replace the $2 permit.

Establishes a trout management area at Lane Spring.

Commission issues statement on gun control urging legislators to carefully consider legitimate uses of firearms.

July 7, Paul Q. Tulenko, former Game chief, dies.

July 18, Jefferson City: New officers are DeLaney chairman, Stark vice-chairman, Linville secretary, Blair member.

C. W. Schwartz trout stamp design approved.

Dorris W. Frazier, assistant superintendent of Education, retires.

Warren Lammert of St. Louis (and others) propose a "friends of conservation" organization to raise funds.

Noren says Leopold-Fox-Callison will make study.

August 16, Jefferson City. Employees buy marble lectern designed by Paul Tulenko to honor I. T. Bode. Bode invited to come September 6 for dedication.

Plans for Columbia research building approved.

Firearms deer and turkey permits raised from $5 to $7.50.

Establishes ten-shell limit for Fountain Grove when area closed to duck hunting.

Guy Berry, superintendent at Shepherd of the Hills Hatchery, to retire March, 1969.

Okays complete renovation of Lake Girardeau.

Signs cooperative vegetation management plan with Corps of Engineers for reservoirs.

September 18, Sikeston, Holiday Inn: Stark absent. In wake of assassinations, Stix, Baer and Fuller donates 74 guns and ammunition to hunter safety program.

Commission asks for 99-year lease from University of Missouri on research building site.

Adopts 12-inch limit on bass in community lakes.

Offers Blue Springs to National Park Service in trade for other lands.

October 17, Jefferson City: University of Missouri grants 50-year lease for research building site; Commission desires 100-year lease.

Commission adopts policy of not letting commercial users have access to permit stubs. (Policy already prevents commercial use of *Conservationist* mailing list.)

November 12, Boonville, Rod & Gun Club: Commission okays lease of NCR 360/20 computer early in 1969; James Bryant is hired as supervisor of data processing.

A. G. Morris attends Commission meeting where he is thanked for years of service; he is one

of few employees left from old Game and Fish Department.

December 19, Springfield, Lamplighter Motel: Commission creates a new exhibits position in Information. Bledsoe, who had been handling the job in addition to radio/TV, had a heart attack.

1968 Summary: Charles "Ted" Shanks dies; Allen Brohn is Game chief. Paul Q. Tulenko dies.

Striped bass introduced into Lake Ozarks.

Department has 30 upland areas, 67 lakes built, 43 accesses. Acquisitions: Ella Ewing Lake, Bonanza, Wayne Helton areas.

Conservationist circulation 179,000.

1968 gun deer season: split, 82 any-deer counties and 32 bucks-only counties, Nov. 16–19 and bucks-only statewide Nov. 30–Dec. 7. All deer to be checked. Archery season: statewide, Oct. 1–Dec. 31.

1968 produced record kill of 559 deer by 15,510 archers.

Turkey season: April 24–28; add Barry, Camden, Osage counties. (Shortening season is a public relations gesture because of lower production last year.)

1969

January 28, Jefferson City: DeLaney absent. Senator Tom Eagleton expressed desire to write article for the *Conservationist* on gun control, which was a hot topic in Congress at this time. Commission, chary of politicians using magazine as a forum, decides to invite the two senators and ten representatives to write brief position statements on gun control for the magazine.

University of Missouri continues to want 50-year lease, Commission 100 years, for research building site.

Joel M. Vance hired as writer, effective April 1.

Quail biologist Jack Stanford named Wildlife Conservationist of the Year by National Wildlife Federation.

February 24, St. Louis, Colony Motor Hotel: University of Missouri finally agrees to sell research building site to Department "at essentially no cost," but with reversionary clause.

Commission orders conservation agents and Field Service agents into state-owned vehicles (to be gradually phased in.)

March 20, Kansas City, Phillips Hotel: DeLaney absent. Cost of living continues rising. Commission orders five percent salary increase effective July 1.

Extension Trapper Robert H. Smith wins American Motors Conservation Award.

Senator Eagleton decides not to write gun control article.

May 14, Branson, People's Bank and Trust Co.: Commission presents 35-year service awards to Vernon Bennett, Guy Berry, M. K. Chapman, Cleval Corey, A. G. Morris (all holdovers from old Game and Fish Department).

Okays an Urban Fishing Program for St. Louis—a first in the nation.

June 25, Jefferson City: ACI awards: three second places in photography, special program on "In-Service Training," overall Information program; third place in exhibits and radio.

Blind Pony to open Oct. 1, with 15-inch length limit on bass.

Nodaway and Little Prairie lakes to open Aug. 15, with 12-inch length limit on bass.

Ella Ewing Lake to open Oct. 1.

Commission approves low bid of $446,514 for research building construction.

Legislature balking at Department salary requests.

Commission approves new posts of visual aids supervisor and publications supervisor in Information.

Hires consulting firm to study Charity Lake dam for safety. (Lake was built by local people in 1966 to be only 3–5 acres; enthusiasm carried them away and they built dam to hold 35 acres. New interstate highway and other proposed construction below dam prompts safety concerns. Firm recommends that it not be filled completely.)

Larry Gale promoted to associate director, Allen Brohn promoted from Wildlife Division chief to assistant director-line. Dunbar Robb promoted to Wildlife Division chief.

Director Noren asks Commission to reduce his salary from $24,500 to $23,000 effective July 1, so as to be more in line with other department heads' salaries. "Reluctantly concurred."

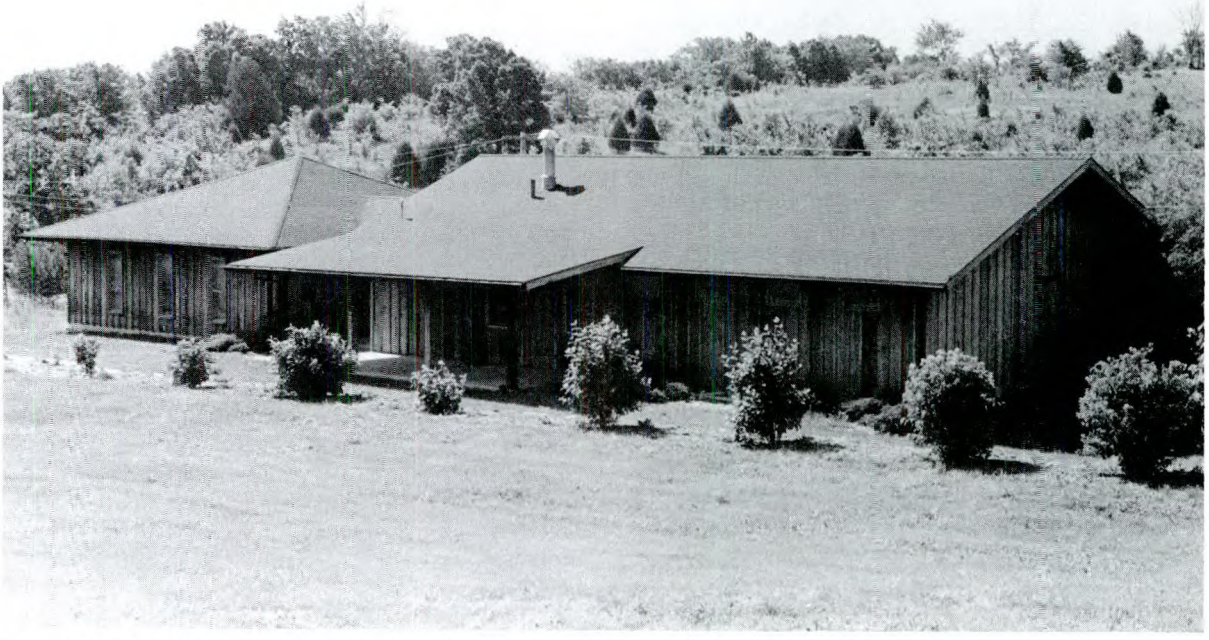
July 15, Jefferson City: New officers are Stark chairman, Blair vice-chairman, Linville secretary, DeLaney member.



The Department celebrated its twenty-fifth anniversary in 1962.



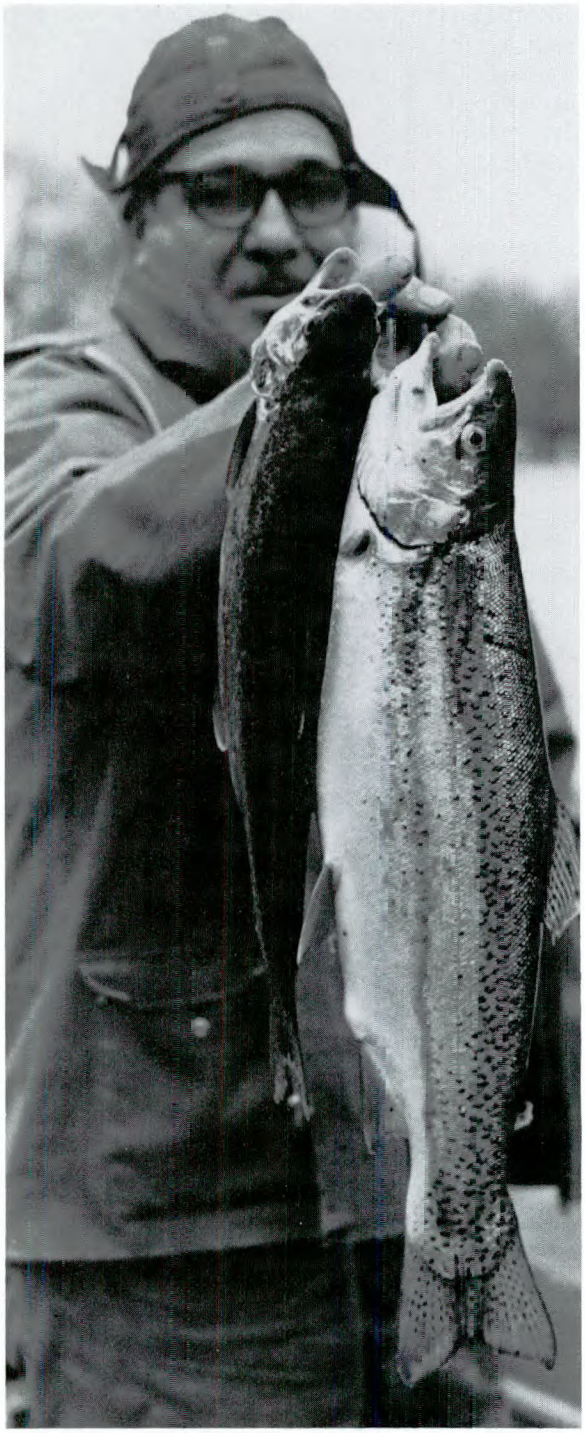
Another distinctive Department sign takes shape in 1965.



A training building was constructed at the headquarters complex in 1968.







Canada geese took to tubs like ducks take to water after this tub, upper left, was installed in 1966. Left, Charles Suppes (on truck) and Eldred Gallagher (at rear) load fish. The trout fishery at Lake Taneycomo resulted in lunkers like this one taken in 1969, above.

Religious group asks to hold non-denominational services at Montrose; Commission denies permission for legal reasons.
Scenic rivers issue continues to occupy Commission.
Legislature reduces appropriation for Department salaries by $214,000.

August 18, Jefferson City: Leopold-Fox-Callison to meet here Sept. 3-4 for final review of their study report; staff has already reviewed it.
Mike Milonski promoted to assistant chief Wildlife Division.
Dean A. Murphy promoted to superintendent of Game.

September 23, Jefferson City: Paul G. Brooks recommended as Protection Division chief when Vernon Bennett retires Feb. 28, 1970.
Inflation and personnel turnover continue. Staff asks for ten percent cost of living increase in two steps. Commission refers matter to governor; a favorable response will increase salaries immediately, an unfavorable response will postpone salary raise to July and October.
Renews foreign bird contract with U. S. Fish and Wildlife Service. (Missouri has received Persian, Talisch, Reeves, white-winged and Korean pheasants, plus bamboo partridge under this program. Korean pheasants are most promising.)

October 16, Jefferson City: Commission okays ten percent salary increase effective Oct. 1.
Okays hiring fiscal consultant Arthur Betts to study funding for broadened conservation program.
Discusses Leopold-Fox-Callison report and how to implement.
Discusses changing Department emblem from hawthorn flower; C. W. Schwartz asked to submit new designs.
Blair wants to give Master Conservationist Award to radio personality Arthur Godfrey. Commission questions whether award is restricted to Missourians; suggests different honor for Godfrey.
Passes memorial resolution on former commissioner Ben Cash who died.

November 12, St. Joseph, Ramada Inn: Commission adopts policy outlining safe use of persistent pesticides.
Barnickol reports Master Conservationist Awards must be to Missourians; Commission sets this aside and orders award for Godfrey anyway, but it was never presented.
Bill Glackin of St. Louis suggests combining deer/turkey permit for archers, and allowing archers to take turkey during deer season. Commission defers action.
Approves new Community Forestry Program, using general revenue funds. Landscape architect position approved, using general revenue.
Approves timber sale from Clow Tract, but cautions staff against selling timber just to raise money, saying "it would be wise to have some areas which could be left in their original or natural state."

December 18, Jefferson City: Commission hears report on government committee formed to work on scenic rivers preservation. Citizens group led by Roger Taylor of St. Charles begins petition drive to create a scenic rivers system, with Department of Conservation administering. The citizen effort complicates the effort by the governmental committee.
Hellmuth, Obata and Kassebaum approved to design additions for headquarters buildings.
Commissioner Stark expresses concern about agents forming union.
Commission okays uniforms (blazer, pants) for top ten staff.
Drag-over Wildlife Area renamed "Ben Cash Wildlife Area."
Gale reports attorney general's opinion that courts do not have the power to suspend permits and Commission does not have jurisdiction to confer such power on the courts.

1969 Summary: Urban fishing program begun in St. Louis City park lakes; first in nation.
Community Forestry Program begun.
Proffit Mountain State Forest acquired.
Gun deer season: Nov. 15-24, four days any-deer in 47 counties, last six days bucks-only statewide. Archery Oct. 1-Dec 31.
Turkey season: April 23-27, same 35 counties plus Cedar, New Madrid, St. Clair.

1970

January 21, St. Louis, Clayton Inn: Commission forbids importation of walking catfish.
Okays 11-man conservation agent training class.

February 19, Jefferson City: Blair absent. Harry Mills' first meeting as commissioner, replac-

ing Linville who served out Tweedie's term. Mills named secretary.

Director reports scenic rivers petition drive generating heat. Citizens think Department favors the petition. Commission orders a statement be issued that it supports scenic rivers but not necessarily this petition; desires a plan that will be fair to all concerned, and funded from a public source.

Nagel, assigned in 1966 to write *Conservation Contrasts*, has completed the manuscript. Commission authorizes 3,000 copies printed.

Roger E. Ponder hired as personnel specialist.

March 19, Jefferson City: Stark absent. C. W. Schwartz presents new logo design of triangular motif. Commission defers action.

Approves five percent salary increase effective July 1. Cost of living has steadily risen from 124.1 to 131.8 (Bureau of Labor Statistics).

Missouri Conservation Program (MCP) Report to be presented at public meeting May 23.

Landowner groups organizing to fight scenic rivers and the *MCP Report.*

First walk-in turkey hunting areas established.

April 17, Jefferson City: Noren reports on meeting with Roger Taylor about modifying the scenic rivers petition. Conservation Federation expresses reservations about the petition also. Noren feels the federal government and Department ought to work for funding of scenic rivers, drop zoning feature and provide for acquisition through easements and fee title.

Noren tells Commission about *MCP Report* and Department reply, *Challenge and Response*, to be released to public May 23.

Commission approves retaining Arthur Betts to study funding sources for expanded program.

Okays Boy Scouts creating "Manuel Lisa Hiking Trail" on Busch Area.

Dr. James Whitley, water quality specialist, receives American Motors Conservation Award.

May 5, 349,000 fish killed in Crooked Creek in Lincoln County after someone dumped chlordane/malathion in it.

May 8, Commission issues position statement on scenic rivers after initiative petition is withdrawn. (Petition is withdrawn following bombing of Roger Taylor's car.)

May 14, Cassville, Roaring River State Park: Commission adopts quorum policy; requires three members, but allows vote by phone, mail or similar method. Absentee votes must be confirmed at a later meeting.

National Park Service not willing to trade land for Blue Spring. Commission decides to try to sell it.

Fred Eugene McCaslin promoted to regional supervisor of West Central, replacing M. K. Chapman (Game and Fish Department holdover) retiring June 30.

Tim D. Frevert hired as landscape architect using general revenue forestry funds.

May 23, Some 200 citizens and press attend meeting at Department headquarters, presenting *MCP Report* and Department's *Challenge and Response.* A Citizens Committee for Conservation (CCC) formed, Ted Scott of Buffalo, chairman. Pledge to implement proposals

June 24–25, Jefferson City: Blair absent. ACI awards: first place in overall Information program, news and radio; second place in exhibits, film *Downstream*; third place in photography.

Noren reports interim legislative committee on recreation and water use holds hearings for scenic rivers proponents and opponents. Leaders are drawing closer together.

National Governor's Conference to be held Aug. 9–12 at Tan-Tar-A. Commission orders Department to cooperate but not to do anything improper for the agency.

Commission adopts as Department's and Commission's official insignia a new triangle logo to equally symbolize the three chief interests: fish, wildlife and forestry.

Assigns ten new conservation agents.

Dickneite summarizes factors starting turkey restoration about 1954: increased cooperation between Department and landowners, better land management practices, enforcement, forest fire control, cannon-net trap, state refuges producing surplus turkeys for trap and release.

Al Palladino hired as education consultant.

July 21, Jefferson City: New officers are Blair chairman, Mills vice-chairman, DeLaney secretary, Stark member.

Commission presents 30-year service awards to Carl Noren and Charles Schwartz.

Conservation Federation endorses *MCP Report* and is to join Citizens Committee for Conservation to implement *Challenge and Response.* Commission is disappointed because Federation response seems to lack enthusiasm.

Blair feels Department should provide free fishing permits for attendees at the National Governor's Conference. Staff feels this is improper. Commission agrees to pay for the permits personally.

An abundance of muzzle loader hunters for the Caney Mountain hunt requires limits on participation.

August 14, Jefferson City: Commissioners personally pay $78.25 for fishing permits for Governor's Conference.

Plans meeting with Conservation Federation Aug. 22 to discuss *Challenge* and Federation's role. Commission resolves that, "if this movement to provide for an expanded conservation program is to go forward, the Commission would urge and would prefer to have the leadership come from the Conservation Federation."

Kenneth M. Babcock hired as waterfowl biologist.

September 23, Sikeston, Ramada Inn: Arthur Betts completes study of funding sources. Schwartzes to edit and prepare for publication.

Commission okays trade with Minnesota, turkeys for grouse.

October 14, Jefferson City: Department gets award from National Rifle Association for providing hunter safety training to 100,000 people.

Commission discusses an attorney general's opinion that seems to limit agents' rights to trespass.

Betts presents his study: a minimum of $21 million is needed to carry out expanded program; suggests considering taxes on minerals or beer.

October 23, First report of low oxygen (three ppm) problem in Lake Taneycomo; trout stressed.

November 10, Mound City, Community Building: Commission notes oxygen deficiency at Lake Taneycomo. Southwest Power Administration demands electricity, but law requires Corps of Engineers to provide water with six ppm oxygen for Department.

Okays contract with University of Missouri for study of funding sources.

Okays use of compound bow for archery hunting.

December 10, Jefferson City: Department receives special award from U. S. Forest Service for developing urban forestry program.

Director Noren presents draft of scenic rivers bill naming Commission as administrator. Commission will adopt if adequately funded. Seeks attorney general's opinion on whether Commission may legally administer plan.

Staff introduces a Natural Areas System Policy.

Agents get new uniform, new guns, mace, handcuffs.

1970 Summary: Irwin T. Bode, first director, dies in Whittier, CA on Nov. 15.

Vernon Bennett retires, Paul G. Brooks is Protection chief.

Leopold-Fox-Callison study of Department.

Expanded conservation program proposed, based on *Design for Conservation.*

Citizens Committee for Conservation formed.

Scenic rivers petitions circulated and withdrawn.

W. O. Nagel's *Conservation Contrasts* published. Nagel retires.

Department's triangular logo adopted.

Over 200,000 farm ponds stocked to date.

Commission now has 67 lakes, 61 accesses. Perry County Lake, Shanks Wildlife Area acquired.

Record Fish Awards program begun.

Stockton Reservoir impounded 1969.

Deer season: 10 days, Nov. 14-23, ten deer management units adopted.

Turkey season: April 22-28, seven days, 41 counties including new ones: Miller, Monroe, Sullivan.

1971

January 14, Kansas City, Muehlebach Hotel: Riverlands Wildlife Area officially named "Ted Shanks Wildlife Area," honoring former Wildlife chief.

Staff suggests fall turkey season, but Commission says not at this time.

Director Noren asks Commissioner Blair if Mrs. E. K. Love would provide funds for Conservation Federation to implement *MCP Report,* but Blair says Mrs. Love had heard adverse

things about report and is not in sympathy with it. Noren says unless Federation gets funds it may not be in any position to work towards broadened funding base for Department.

February 11, Jefferson City: Noren reports on two scenic rivers bills. Commission says it favors preservation but insists on just compensation for landowners.

Commission makes it optional for conservation agents to carry handcuffs.

Trades 12 turkeys for 30 prairie chickens with Oklahoma.

Blair says too much emphasis being put on the kill in reporting open seasons, especially deer and turkey.

Mills feels agents should not wear firearms at all times, other Commissioners disagree. Ask for a study.

March 16, St. Louis, Clayton Inn: DeLaney and Stark absent. Director feels Department is being hurt by scenic rivers hassle. Noren wants to shift proposed administration to some other agency. Blair opposes this.

A bill that would give islands and sandbars to the Department passed by the legislature.

A proposed bill, HJR 56, would create a Department of Natural Resources and eliminate the Department of Conservation.

Noren reports that at North American Wildlife Conference the talk was of anti-hunting philosophy and the need to move into non-game wildlife programs, as reflected in the *Design*.

Inflation rises to 119.1 (BLS index); Commission approves a five percent raise effective in July.

U. S. Fish and Wildlife Service may not be able to fund the urban fishing program, so Commission orders to continue with Department funds.

Biologist Glenn D. Chambers promoted to work half-time on pheasant research and half-time on motion pictures.

Blair says he thinks Love Foundation will give Conservation Federation some money to promote *Design*.

April 19, Jefferson City: Show-Me Heritage Association asks Commission to withdraw from scenic rivers effort and officially state that it will not administer such a system. Commission responds indignantly and reaffirms stand. Press statement issued.

Rep. E. J. "Lucky" Cantrell angered over pressure from conservationists opposed to his effort to create a DNR.

Noren reports Love Foundation gave Conservation Federation $3,000.

University of Missouri study says soft drink tax better revenue source than minerals severance tax, probably $20 million per year.

May 19, Hunnewell, Community Center: Commission okays establishing a Springfield "communications center" office.

Director Noren reports on meeting to study University of Missouri and Betts' funding proposals. Citizens Committee decides to seek a soft drink tax via initiative petition and constitutional amendment. Staff is preparing a *Design for Conservation* to be presented to the Citizens Committee meeting June 26. Goal is to get initiative petitions signed by end of year.

Okays training class of 12 conservation agents.

Approves purchase of Powell Ranch in Crawford/Phelps counties; 5,413 acres from Powell Lumber Company at $455,655, including a donation of $170,000 if Department names it "Woodson K. Woods Wildlife Area."

June 24, Jefferson City: Commission increases maximum agent strength to 130 men.

Director Noren reports on *Design* for June 26 meeting with Citizens Committee.

Bass fishing contests receiving unfavorable publicity.

July 13, Jefferson City: Commissioners Jim Tom Blair and Robert G. DeLaney reappointed.

New officers are Mills chairman, DeLaney vice-chairman, Stark secretary, Blair member.

ACI awards: first place in overall Information program, radio; second place in exhibits, film *Return of the Wild Turkey*; third place in photography.

Commissioner DeLaney reports on good reception of *Design* and enthusiasm of Citizens Committee.

Okays agreement between Department and Leo Drey's L-A-D Foundation on Clifty Creek and Big Piney Narrows as natural areas.

August 16, Master Anglers program begun for those catching large fish that aren't records.

August 18, Jefferson City: Outdoor Writers Association of America award to film *Return of the Wild Turkey*.

Resolution honoring Dunbar Robb who died July 11.

Stegner reports on Citizens Committee activities. Walter Nowotny, an assistant attorney general, is drafting the petition, with Judge Cullen Coil's assistance.

Dean. A. Murphy promoted to assistant Wildlife Division chief.

September 9, Sikeston, Ramada Inn: Department caught in a dispute between the governor and the legislature on fiscal reporting.

Stegner reports on Citizens Committee activities.

Design receives endorsements from Coalition for the Environment and the Sierra Club. County petition drive chairmen in place.

Commission issues policy on firearms use by agents: "No enforcement agent shall draw his sidearm except when there is a clear and immediate danger, nor fire his sidearm except in his own defense, or where the life of another person is in danger. These restrictions do not apply, of course, to target practice or other use of the sidearm in non-enforcement activities."

October 13, Citizens Committee for Conservation launches petition drive.

October 14, St. Louis, Clayton Inn: Commission hears report on fund solicitation from magazine mailing list; experts amazed at response of magazine readers in donating funds for the petition drive.

Wednesday, Oct. 13, a petition drive kick-off breakfast was held in Columbia.

Jerry Sugerman of the Sierra Club tells Commission of Meramec Dam fight. Criticizes Ed Glaser's statement in Washington in May, and asks Commission to rescind it. Commission will reconsider.

Commission authorizes temporary hiring of Information Specialist James H. Auckley under a Vietnam veterans hiring program.

November 17, Clinton, Inn at the Vagabond: Commission shifts its ground on Meramec Dam, slightly.

Noren reports on State Reorganization Committee.

Petition drive going well. (Most support from St. Louis and Kansas City areas, northeast, northwest and southeast. Some opposition in Springfield area. Probably more opposition in the Jefferson City area than anywhere else. Farm Bureau said to oppose.)

Training class of 19 conservation agents approved for Jan. 1972.

November 21, Larry Gibson of Moberly bags record deer, second in Boone and Crockett Club records.

December 20, Jefferson City: Stark absent. Stegner reports petition drive has 50,000 signatures, with 20 counties over quota. (Some areas are less successful.) Stewart Udall and H. Nat Reed of the U. S. Department of the Interior agree to come to Missouri to stump for the campaign.

Continues urban fishing program in St. Louis. Purchases fish to stock five inner city lakes; will provide 100,000 fishing trips.

Thomas J. Troughton hired as cinematographer.

1971 Summary: Woodson K. Woods, Ralph and Martha Perry wildlife areas, Little Black State Forest acquired.

"Old Blue," famous State Fair catfish, died.

Deer season: nine days, Nov. 13-21.

Turkey season: 11 days, Apr. 22-May 2, add Benton, Maries and Oregon counties for total of 44 counties.

Conservationist circulation at 196,500. Commission enthusiastic about use of full color photos. Okays increasing from 16 to 20 pages.

Dunbar "Dixie" Robb, Wildlife chief, dies July 11.

Resolution on the death of Commissioner Lewis D. Linville.

Special archery hunt at Knob Noster for 600 archers and muzzle loaders hunts at Caney Mountain and Deer Ridge. Expands ten-shell limit from Swan Lake area to the zone.

Mike C. Milonski promoted to Game Division chief, effective Aug. 1, replacing Dunbar Robb.

1972

January 18, Jefferson City: Staff recommends a fall turkey hunt but Commission defers this.

Blair wants deer and turkey kill figures withheld until regional supervisors report at month's end. Believes too much emphasis is placed on number of deer killed.

John L. Funk transferred from supervisor of Fisheries Research to staff specialist, to work on reports and publications prior to retirement Nov. 30, 1974.

Commission to attend Senate and House hearings on reorganization of state government. Three amendments proposed: 1) to retain present constitutional authority of Commission with regard to employment of personnel, setting job standards and administering a personnel system; 2) to retain the dedication of monies presently earmarked for the Commission and to establish a state park fund by using the present language of the constitution, but increasing the amount of earmarked funds from one mill to three mills to operate parks, boating and outdoor recreation programs; 3) establish a Department of Conservation which would include parks, boating and outdoor recreation, and to establish a separate department of environmental affairs to which could be assigned the agencies for regulatory interests in natural resources such as water pollution, water resources and air conservation. (All proposed amendments failed to be adopted.)

February 9, Jefferson City: Stegner reported meeting with regional supervisors to get an accurate count of petition signatures obtained to date. (Some county coordinators appear to have lost interest. Each regional supervisor is to get ten petitions per agent, and agents will distribute them to people they feel can get signatures. Some disappointment expressed that more signatures not gathered at this point in the campaign. Employees should refrain from carrying petitions at this time, but Commission may reconsider at a later date, if necessary.)

It is not believed reorganization bills will pass, but Commission continues to support, with its suggested amendments.

A proposed House bill would provide free fishing permits for those over 65; Commission pledges free permits for them if voters approve broadened funding in November.

March 23, Jefferson City: DeLaney absent. Stegner reported that the soft drink petition drive quotas had been reached or surpassed in six congressional districts. There are enough signatures to place the issue on the ballot. Efforts now will be to raise funds for the final campaign. Stegner also reported that a local newspaper article quoted Charles Callison, president of the National Audubon Society, as saying the anticipated funds would be divided equally between hunting and fishing and non-hunting and fishing interests. This has won support of Wilderness Society, Sierra Club and Coalition for the Environment.

Noren reported that the reorganization bill (HJR 65) came out of the House with essentially the amendments suggested. The Reorganization Committee has apparently accepted the amendments.

Commissioner Harry Mills reported that the Environmental Defense Fund brought suit to stop construction of Truman Dam with assistance of Missouri Chapter of the Wildlife Society, which includes a lot of Department employees. He believes this to be contrary to the "policy expressed by the Commission regarding Truman Reservoir." There was a great deal of discussion about the position of employees in this and similar situations that might arise, and Mills called for the director to investigate the situation. Blair felt the Commission had not been positive enough in its position statements, which contributed to the confusion on the part of staff. Mills "stated he wanted it made very clear that in no manner would he want to do anything to silence an employee of the Department on anything that is legitimate information." Employees may not provide affidavits, but will serve if subpoenaed.

Commission authorized abbreviated form of the agenda be made available to reporters and others if requested. Assigns 17 new conservation agents.

March 31, Massive oil spill into South Fork of Salt River kills estimated 222,000 fish.

April 3, Special meeting, Jefferson City: Stark absent. Assistant Attorney General Walter Nowotny (assigned by Governor to represent Water Resources Board, State Park Board and Interagency Council for Outdoor Recreation) reports Federal Judge John Oliver said plaintiffs had difficulty getting information from Department employees and he understood there was a policy inhibiting employees in providing the information. Judge would look on any type of restrictions placed on employees as a violation of civil rights, Nowotny states. Commission rescinds its policy that employees may not furnish affidavits.

Stanley G. Patterson of Shell Knob began campaign against trapping after his dogs are

caught in illegal traps. Hundreds of letters received.

Commission votes to forbid importation of the white amur or grass carp.

Problem created by prairie chickens at Whiteman Air Force Base; Air Force decides it will not shoot prairie chickens but work with our personnel in solving the problem.

April 21, Jefferson City: Stark absent. Stegner reports a news conference held April 14 announced enough signatures to get soft drink tax on the ballot. A fund raising luncheon is scheduled for May 25 in St. Louis, with former Secretary of the Interior Stewart Udall as speaker.

Judge Oliver okays Department instructions to employees with respect to Truman Dam litigation.

Commission chairman Harry Mills pledges open meetings for the Conservation Commission.

April 24, LeRoy Braungardt of Moscow Mills, Robert Lowe of Leslie, and Jake Arnold of Cherryville become first archers to take turkeys, opening day.

May 17, Sweet Springs, Blind Pony Wildlife Area: Commission receives many more anti-trapping letters.

Okays trade with Nebraska of 9 turkeys for 27 prairie chickens.

Agents John Adams and Richard Schroeder sued over use of firearm in an arrest. Schroeder was acquitted in Moniteau County, but Adams, tried in Cole County, was found guilty and assessed several thousand dollars in penalties. Department employees, in a show of solidarity, took up a collection and paid off most of Adams' penalties.

June 27, Jefferson City: Stegner reports over 160,000 signatures obtained.

Commission reaffirmed that it will provide free fishing privileges to Missourians over 65 years of age if soft drink tax funding proposal is approved.

Master Conservationist Award voted for Ted Scott, chairman of the Citizens Committee for Conservation, "in recognition of his contributions to conservation efforts through the years, and especially for his efforts in the soft drink tax initiative campaign to provide a broadened funding base for the Department." (Was awarded in April, 1973.)

Stanley G. Patterson asks for an end to trapping. Many letters received, both pro and con.

Commission reaffirms equal employment policy.

July 5, Ed Stegner turns in petitions to secretary of state.

July 18, Greenwood, Reed Area: Blair absent. New officers are DeLaney chairman, Stark vice-chairman, Blair secretary, and Mills member.

Director Noren reports attorney Thomas Graham has filed an objection with the secretary of state because the petitions do not comply with provisions of the state constitution. The Conservation Federation's board met July 16 and "indicated an unswerving attitude on the pursuit of this goal."

Letters continue to pour in on trapping—pro and con. Farm Bureau, Missouri Farmers Association and National Farmers Organization asked for their views.

Commission okays trade of 24 turkeys for one million striped bass fry or 10,000 striped bass fingerlings from TVA.

Commissioner DeLaney concerned that we do not have more black employees and wonders if we can be inadvertently discriminating. Noren asks for permission for outside study to be made of hiring practices, salaries and classification structure.

August 16, Jefferson City: Commission approves job procedures study by University of Missouri professors, Drs. Carl Willis and Paul King.

Stegner says petition is in circuit court and if Judge James Riley rules against petition an appeal to State Supreme Court will be made.

Noren requests permit increase if petition does not get on ballot, but Commission defers this.

September 11, Sikeston, Ramada Inn: Supreme Court ruled against the petition, only Justice Robert Seiler dissenting. Commission discusses funding options in light of Court decision; wants to take advantage of petition momentum, whether soft drink tax or other. Citizens Committee resolves to continue its efforts.

Committee to Outlaw Steel Traps publishes ads in Jefferson City, Springfield and other areas, urging people to write the Commission. Letters continue to come in, but no response from farm organizations.

September 23, First National Hunting and Fishing Day observed in Missouri.

October 16, Jefferson City: Charles Hooker honored for winning American Motors Conservation Award, first engineer to do so.

Commissioners meet with editorial board of *Post-Dispatch*, others, to discuss *Design*, petition drive.

As of Oct. 4 Commission has received 3,278 letters opposing trapping and 175 letters favoring trapping, plus petitions with signatures of 2,592 persons opposing and 6,081 favoring trapping.

Film *Design for Conservation* is released.

November 15, Mound City, Community Building: Noren reports that groups and individuals opposing soft drink tax have been asked to come up with alternative by Nov. 20.

Outdoor writers Bill Bennett and Ray Heady convince Commission to rescind its order restricting deer kill figures.

Staff reports Florida is first state to ban steel leghold and Conibear traps on a statewide basis. New Jersey has banned traps in some counties.

Okays training class of 12 agents.

December 8, Jefferson City: Noren reports on Steering Committee meeting; he is concerned about indecision and lack of unity. An Executive Committee of Dr. C. F. Luebbert, Robert G. DeLaney, Mrs. J. Russell Wilson, G. Andy Runge, Richard Southern and Dr. Rollin Sparrowe appointed. Citizens Committee raised $117,000.

Stanley Patterson of Shell Knob appears before Commission to plead against steel leghold traps. As of Nov. 27 Department has received 4,196 letters and petitions with 5,787 signatures opposing trapping, plus 275 letters and 6,233 petition signatures favoring trapping. Farm Bureau issues resolution in support of trapping.

Commission okays trade with Kentucky of 15 turkeys for 45 grouse.

Missouri Wildflowers by Edgar Denison goes on sale.

1972 Summary: Soft drink tax petition drive succeeds but petition ruled invalid.

Forest survey reveals Missouri lost one million acres of forest land in last ten years.

Joe G. Dillard promoted to superintendent of fisheries research, replacing John Funk.

Jerry J. Presley promoted to assistant state forester, replacing Gus Hoyer.

John V. Frye promoted from district supervisor to conservation agent supervisor in charge of equipment and training.

Harold G. White promoted from agent to metropolitan services coordinator in the Springfield office.

Committee to Outlaw Steel Traps launches drive.

Department now has 73 lakes and 77 accesses.

Special Knob Noster State Park deer hunt for archers set Oct. 14-15.

Deer season: nine days, Nov. 18-26.

Turkey season: April 24-May 7, 53 counties, including new ones: Lewis, Clark, Pike, Lincoln, St. Charles, Polk, Webster, Ripley, Livingston.

1973

January 22, St. Louis, Clayton Inn: Commission approves $3,000 for University of Missouri study, "Projection and Evaluation of Public Revenue Yields from Certain Tax Sources," Feb. 1-Mar. 15, 1971.

Legislature using the joint resolution route to force free permits for the elderly. Commission says it will be forced into this someday, and might as well take the least troublesome route.

Commission hears report on constitutional amendment to reorganize state government approved by the voters in November. Rep. Volkmer plans to put Parks, Interagency Council for Outdoor Recreation and Lewis and Clark Trail Commission, possibly Boat Commission, under Conservation Commission.

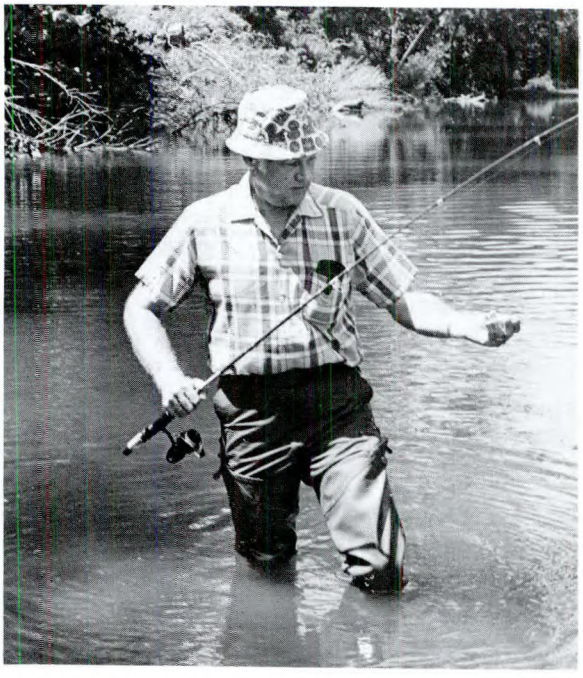
Commission takes stand to continue to permit trapping, but not to issue a statement at this time. As of Jan. 3 Department had 5,873 letters and 7,391 petition signatures opposing trapping; 456 letters and 6,233 petition signatures favoring trapping. Missouri Farmers Association survey shows 73 percent in favor; 17 percent opposed.

Okays contract with Corps of Engineers to study paddlefish; will spend $460,000 over three years.

February 15, Jefferson City: DeLaney absent. Staff reports dissension in Steering Committee over which tax to promote. Stegner and Scott want to abandon soft drink tax.



The Commission affected by state government reorganization in 1974 was composed of, left to right, Andy Runge, Jim Tom Blair, Robert DeLaney and Harry Mills. A Supreme Court decision allowed Mills and DeLaney to continue as commissioners after Gov. Bond attempted to replace them with Gene Dement and Robert Talbot.



Larry Gale served as assistant director from 1964 to 1979, when he assumed the reins of director.



Dean Murphy, who loomed large in the successful deer restoration program, poses with the nation's record atypical white-tailed deer rack.



Governor Christopher Bond meets Omega, the bald eagle, during a 1982 Wildlife Week.



John W. Robinson conducted fisheries research on the state's big rivers. In this early 1970s photo, he tracks fish via radio.



D. G. "Del" Mugford headed up the Department's forest nursery effort from 1961 to his retirement in 1982.

As of Feb. 7 Department had received 5,993 letters and 8,484 petition signatures and 257 newspaper coupons opposing trapping; 493 letters, and 6,316 petition signatures favoring.

March 13, Jefferson City: DeLaney absent. Commission agrees to waive fishing permits for those over 70, beginning in 1974.

Stegner asks the Commission's opinion on the initiative petition. Reports that he and Ted Scott had been criticized for not moving more swiftly, but they held off because of fears of jeopardizing a $2 million capital improvements appropriation. Blair said they should have proceeded immediately, but now there is no clear-cut direction.

Commission officially endorses present trapping regulations and issues a policy statement.

April 14, Jefferson City: Stark absent. Land use agreement continued with L-A-D Foundation, Inc. for Department management of existing and new lands owned by L-A-D Foundation.

Experts studying Department recruiting methods says they are satisfactory, though they lean more (85 percent) toward oral interview and only 15 percent on written tests. No obvious racial bias they could see.

Assigns 12 new conservation agents.

May 15, Eminence, Forestry Headquarters: An announcement for recruiting conservation agents kicked back by Division of Employment Security because of discrimination due to age, height and weight requirements. Two applications received from women, but they were told job was limited to males. Commission orders revision of qualifications to abolish discriminating factors.

Authorizes permits to be valid from date of sale in December.

Staff asked for permit increase but Commission defers.

June 4, Commission signs 25-year lease with Associated Electric Cooperative of Springfield to manage Thomas Hill Reservoir area for public use.

June 28–29, Jefferson City: Federal price and wage freeze complicates salary increase or permit price rise; Commission approves some permit price increases.

Commission again denies fall turkey season.

Adopts policy statement regarding hunting to offset growing anti-hunting sentiment. "Recognizes sport hunting as one legitimate and desirable use of wildlife resources and further acknowledges the essential support of hunters for many programs of wildlife conservation, research and management. . . . The Commission recognizes the principle that hunting is a means for encouraging the wise use and perpetuation of the wildlife resource."

July 17, Jefferson City: G. Andy Runge of Mexico replaces William Stark as commissioner.

New officers are Blair chairman, Runge vice-chairman, Mills secretary, DeLaney member.

Governor Kit Bond attends the Commission meeting. Noren says this is an historic occasion as it is the first time a governor has ever attended a Commission meeting. (Noren was unaware that Gov. Forrest C. Donnell attended a Commission meeting March 15, 1941).

Union Electric Co. contacts director about lands bought in Callaway County for a nuclear plant. Noren suggests it might be useful for wildlife management. Earl K. Dille, UE's executive vice-president, expresses interest.

August 15, Jefferson City: Commission issues policy statement on bass tournaments, stating that it ". . . strongly endorses the concept of fishing for relaxation and for the inherent enjoyment of the sport. It also recognizes the fact that organized competitive fishing tournaments are on the increase. . . . There is no evidence of harm to the fishery resource."

Biologist Ollie Torgerson's anti-deer poaching campaign approved in response to increased poaching aggravated by a meat shortage.

Voter registration law affects petition gathering; attorney general must decide if petition signers have to be registered voters.

Robert Wilson of the Missouri Trappers Association speaks to the Commission on behalf of trapping. Stanley G. Patterson of the Committee to Outlaw Steel Traps speaks in opposition to trapping. He admits the committee is composed only of himself and his wife.

August 19, Department sends 28 firefighters to help battle forest fires near Yosemite Park in California.

September 25, Jefferson City: Ed Stegner says attorney general ruled petition signers do not have to be registered voters. To be certain, Citizens Committee for Conservation asks for declaratory judgement in circuit court. Commission recognizes that until the court rules, any new petition drive cannot proceed. Stegner hopes to kick off new campaign in November, 1974.

Commission discusses new open meetings law. Counsel O'Malley asked to outline executive session items; Commission wants other business open to the public.

Biologist Jack Stanford reports quail hunting pressure up 90 percent in ten years. Bag limits cut from ten to eight daily.

November 1, Duck season opens with point system for first time.

November 14, El Dorado Springs, Civic Center: Commission adopts an affirmative action program in hiring.

Approves new class of 15 agent trainees.

December 2, New film about Canada geese, *Wild Chorus,* premieres at Midwest Fish and Wildlife Conference in St. Louis.

December 18, Jefferson City: Blair absent. Commission discusses possibility of gasoline rationing's effects on programs during periods of gasoline shortages.

Okays trading 30 turkeys for 75 prairie chickens with Kansas.

December 18, Special meeting with State Park Board to discuss hunting in state parks: hunting allowed in Knob Noster since 1960, move to open Sam Baker.

James Wilson, Parks director, wants Department and Parks to jointly work on land acquisition. Noren demurs, but urges cooperation in other areas. Commission feels its constitutional provisions preclude joint funding.

1973 Summary: 1973-74 budget of $14,881,649 approved.

Deer season: Nov. 17-25, nine days.

1973 Turkey season: April 24-May 6, add Putnam, Schuyler, Scotland, Knox, Macon, Shelby, Saline, Cooper, Boone and Christian counties for total of 63 counties. Also approved two birds, one per week.

Ron Thoma promoted to realty acquisition agent replacing Edgar Biffle, retired.

Robert King promoted to conservation agent supervisor in charge of special investigations unit.

Harold White, manager of Springfield office, resigned.

1974

January 18, Jefferson City: Noren says further meetings with Parks Director Jim Wilson produced no solutions for joint funding except the possibility of a sales tax, but Gov. Bond opposes a sales tax.

Because of gas shortage Commission orders a move into intermediate-size cars and reduces travel. (Later changed its mind.)

Dr. David A. Leuthold of University of Missouri hired to do a public opinion survey on tax sources, funded by Love Foundation.

Associate Director Gale reports pending legislation would take "cultured fish" from control of Commission; will vigorously oppose.

Personnel Officer Ray Wells discusses job classification systems; recommends Carl Lutz of Chicago to study Department system and make recommendations.

Ruffed grouse have been released on five sites: Ashland area, Carmen Spring and Daniel Boone state forests, Logan and DuPont wildlife areas.

March 22, Jefferson City: Stegner and the Federation Board ask if Commission still needs increased revenue and if it still favors soft drink tax. Blair says need is imperative, and no other suitable funding source has been suggested.

Noren reports Governor may try to appoint new commissioners under government reorganization.

Commission okays hiring Carl Lutz to study jobs/salaries.

Okays sending 2,000 paddlefish fry to Russia.

April 15, Kirksville, Holiday Inn: Blair absent. Inflation is up 1.3 percent from February; salary increase is requested.

Game Division renamed Wildlife Division to increase emphasis on non-game species management.

Fourteen new conservation agents are assigned.

May 5, Dr. Z. Lee Stokely, writer and conservation pioneer, died. Led fight against Ozark dams.

May 23, Woodson K. Woods Wildlife Area: Discussion of reorganization: do Commissioners have to be reappointed? Commission says no, as does Rep. Volkmer. Governor says yes.

Carl F. Lutz bid of $18,500 for personnel study accepted.

Commission okays trade with Texas, 15 turkeys for 45 ruffed grouse from Minnesota or Wisconsin.

June 22, Werner Otto Nagel, biologist, writer and conservation philosopher, dies.

June 24–25, Jefferson City: Anticipated 5 percent drop in permit sales did not occur; sales increase instead.

Larry R. Gale's title, associate director, changed to deputy director.

Commission okays trade with Wisconsin, 45 turkeys for 135 ruffed grouse.

Okays trade with Iowa, 52 turkeys for 1,000 pheasants for a total of 260 turkeys for 5,000 pheasants over three years.

June 28, Special meeting, Senate Hearing Room, State Capitol: Reorganization formalities: Commissioners present were Jim Tom Blair, Andy Runge, Gene Dement of Sikeston and Robert E. Talbot of Joplin; all formally sworn in. (DeLaney and Mills were ousted.)

June 28, Informal meeting, Department Headquarters: New officers are Runge chairman, Blair vice-chairman, Talbot secretary, Dement member.

Commission renews the appointment of Carl R. Noren as director and approves continued employment of present personnel.

July 22, Jefferson City: Commission approves retiring badges and law enforcement credentials of retiring commissioners and employees, which may be retained as mementoes of service.

"Management by objectives" urged by governor.

Declaratory judgement by Supreme Court says that petition signers must be registered voters. Stegner says this will make petition efforts much more difficult.

Regulations Committee is Deputy Director Gale chairman, Assistant Director Brohn, Legal Counsel O'Malley, four divisions' chiefs and the Information officer.

Payment of interest on Commission funds to begin July 1, 1974.

August 15, Jefferson City: Talbot absent. Talbot suffers heart attack during second week of August.

Motion picture *Wild Chorus* gets OWAA Four-Star Award.

Commission discusses forming undercover unit; Paul D. Cook is first field investigator assigned to it.

September 19, Commission okays purchase of 1,064-acre Bluffwoods, in Buchanan County.

September 25, Jefferson City: Talbot absent. Okays lease agreement with Nature Conservancy for six prairie tracts. Now 35 areas in the Natural Areas System.

Officers of newly formed Conservation Agents Association (Gary Howard president, Paul Cook vice-president, Harry Quigley secretary, George Manville treasurer) appear before the Commission. They state their aims are to improve the agents' working conditions; suggestions will be forwarded through the chain of command. Commission assures them that they are welcomed as a means to improve the entire organization.

October 17, Jefferson City: Talbot absent. Employees in uproar over Lutz classification system. Morale affected. Noren feels this may cause a break in "fine cooperative spirit that has existed among all employees in the past."

Stegner reports the CCC Steering Committee met Saturday, Oct. 12, and decided to go for a sales tax (vote 17-1) and attorney Cullen Coil was asked to draft the amendment. (The Leuthold public opinion survey had not shown a strong preference for either a soft drink tax or sales tax.)

Paddlefish research outlined for Commission in connection with Truman Dam problem.

Samuel B. Kirby promoted to Field Services coordinator to replace Kenneth R. Hicks due to retire Jan. 3, 1975.

At this time there had been negotiations with the University of Missouri over disposition of the Weldon Spring tract. A statewide use plan had been prepared and released and University president was unhappy about the public pressure being brought to bear.

November 14, Newark, American Legion Post 569: Talbot absent. Commission turns down Ducks Unlimited request for a waterfowl stamp.

Adopts a policy of financial disclosure for certain employees.

December 16, Jefferson City: Talbot back. Confirmation of Commissioners being debated in the Senate. Dement and Talbot's positions not clear. O'Malley says two commissioners cannot transact business.

Gene Dement and Robert Talbot, not expecting to be confirmed by the Senate, express their pleasure at having served as commissioners.

Lutz appeared to explain his system of job classification.

Commission wants direct distribution of permits in Cooper and Moniteau counties for two years, and to add eight more counties, gradually taking over all permit distribution to save up to $200,000 annually.

Authorizes a fall archery season for turkeys in 1975.

1974 Summary: There are now 35 upland game areas.

Bluffwoods, Heath state forests acquired.

Conservation agents form association.

Budget of $16,114,453, plus general revenue $1,500,000, plus Revenue Sharing Trust Fund $1,500,000 for a total of $19,114,453 approved.

Gun deer season: Nov. 16-24, nine days. Unit Six split.

1974 turkey season: April 22-May 4, add Marion, Dallas, Laclede and Wright counties. Only one bird limit, due to lower production, gas shortage.

James Schroder promoted to Springfield office as metropolitan services coordinator, effective April 1.

Difficulties over commissioner appointments following state government reorganization.

Citizens Committee decides to go for sales tax amendment to fund *Design for Conservation.*

Lutz employee classification system causes uproar.

1975

January 16, Jefferson City: Runge and Blair present. "Due to legal uncertainties surrounding the appointment and confirmation of two commissioners (Gene Dement and Robert Talbot) under the 1974 reorganization of the Executive Branch of state government, only two commissioners were present for this meeting." (Minutes.)

Globe-Democrat reporter raises question of quorum. Since there are only two commissioners present, can they transact business? Runge says as far as he knows they must proceed with business. Can confirm actions taken when third commissioner is present.

Ken White asks Commission to get involved in national Bicentennial observance.

Runge and Blair okay start of agent training class Aug. 1, 12 to 15 trainees.

February 20, Jefferson City: (Blair/Runge). Hires Cyril M. Hendricks as legal counsel replacing Julian O'Malley, to retire March 31.

Dispute with senate appropriations committee which wants a line-item budget and objects to salary request. Commission feels its constitutional authority is at stake.

Staff balking at management by objectives and commission authorizes bringing in an expert for one-day seminar.

Senate Bill 58 will establish a Missouri Register, similar to the Federal Register, in which all proposed rules and regulations must be announced. Commission says try to get it modified if possible to exclude Department.

March 20, Jefferson City: (Runge/Blair). Noren says Citizens Committee wants to go for a sales tax.

Director recommends modified Lutz salary plan but Commission wants to study some more.

April 16, Jefferson City: (Runge/Blair). Commission reaffirms Nov. 22, 1949, policy on dams on Ozark streams.

Adopts modified Lutz salary and classification system, effective April 1, 1975.

Stegner asks about employees and participation in *Design* campaign.

Approves wilderness proposals before Congress.

Approves a tag reward system on bass in three reservoirs.

May 2, Commission endorses new petition drive.

May 9, Biologist Clarence "Salty" Daniel receives American Motors Conservation Award for system of evaluating habitats in water resource projects.

May 10, Biologists Charles and Elizabeth Schwartz receive honorary doctor of science degrees from University of Missouri.

May 22, Van Buren, Big Spring Cafe: (Runge/Blair). Commission adopts memo on employee participation in campaign.

Authorizes first fall archery turkey season: Oct. 1-31 in 74 counties.

Authorizes sending 15,000 paddlefish larvae to Russia; 5,000 sent last year. Russians rearing and releasing them in freshwater reservoirs. Also 30,000 larvae to South Dakota.

June 26, Jefferson City. (Runge/Blair/DeLaney; Mills absent.) "As a result of a decision by the Missouri Supreme Court on June 16, 1975, and the subsequent withdrawal of an opinion by the attorney general relating to the appointment of Commissioners as head of the Department under the Reorganization Act of 1974, the governor notified Mr. Robert G. DeLaney and Mr. Harry Mills they will continue as current members of the Conservation Commission." (Minutes.)

Commission confirms all actions between July 22, 1974 and May 22, 1975.

Gerald L. Howell hired as personnel officer replacing Ray M. Wells, retiring June 30.

Missouri Register Law passed: Department is included in it for some regulations.

"Primitive weapons hunts" renamed "historic weapons hunts."

Okays 18 new agent trainees, including one woman, Jill Cooper.

July 17, Jefferson City. Robert E. Talbot is new commissioner replacing Mills; term is July 1, 1975 to June 30, 1981.

New officers are DeLaney chairman, Talbot vice-chairman, Blair secretary, Runge member.

July 29, 106,000 fish killed in Tarkio River after anhydrous ammonia dumped into tributary.

August 14, Barite mine tailings pond dam bursts and pollutes miles of Big River.

August 26, Jefferson City: DeLaney and Runge attend Citizens Committee meeting Aug. 23; petition campaign progressing.

Talbot tells of Meramec float with Governor and Sierra Club. Talbot wants Department to fight Meramec Dam. Governor asks for Commission's views.

Trio of citizens asks Commission to fight Bourbeuse Dam. Commission asks staff to prepare a position paper.

September 12, Commission chairman Robert DeLaney condemns CBS television program "Guns of Autumn" as biased against hunting and conservation.

September 24, Jefferson City: Stegner says he has 40,000 signatures on hand, campaign going well.

Commission hears report on Bourbeuse Dam, votes to oppose it. Goes on record as favoring stream preservation system, preferably administered by the state, but with adequate funding.

Purchases Bat Cave in Miller Co. for $7,000/acre.

Okays 15-inch length limit on bass in Table Rock, Pomme de Terre and Lake of the Ozarks. Already have 29 lakes with a 15-inch limit.

October 22, Salem, Montauk State Park: Noren reviews organization structure.

Sierra Club, through Roger Pryor, thanks Commission for its opposition to dams on Bourbeuse River.

Jim Gamble and Meramec Basin Association asks Commission to reconsider its stand on Bourbeuse and Meramec dams.

October 31, Commission announces Liberty Tree program as observance of nation's Bicentennial.

November 20, El Dorado Springs, Civic Center: Commission reaffirms its opposition to Bourbeuse Dam.

Commission authorizes one person from each line division to attend Regulations Committee meetings beginning Dec. 1975.

Assigns 17 conservation agent trainees.

December 15, Jefferson City: First woman conservation agent, Jill Cooper, assigned to Kansas City area.

1975 Summary: 1975 deer season: Nov. 15-23. Now 12 units.

1975 turkey Season: Apr. 21-May 4, only one bird. Seven new counties: Cole, Moniteau, Ralls, Randolph, Howard, Linn, Cape Girardeau.

1975-76 budget of $20,805,464.

Conservationist out-of-state subscriptions raised from $1 to $2 or three years for $5.

Earl P. Coleman promoted from assistant Pro-

tection superintendent to Protection superintendent effective Jan. 1, 1976, replacing James L. Bailey retiring Dec. 31.

John V. Frye promoted from Protection special assistant to assistant superintendent of Protection replacing Coleman.

D. Hurlbut promoted to Operations officer replacing Robert Wells who retires.

Osal B. Capps named assistant director for legislative affairs as well as state forester.

1976

January 12, Jefferson City: Commission adopts policy on Lock and Dam 26 and 12-foot channel.

Okays use of magazine mailing list by Citizens Committee.

Missouri Register Law in effect and *Code* is filed as part of it.

February 13, St. Louis, Stouffer's Riverfront Towers: DeLaney absent. Holly Ridge and Bat Cave natural areas designated.

Commission adopts policy stand on Meramec Park Lake.

Jerry Sugarman asks Commission to oppose Meramec Dam. Duane Woltjen says dam violates endangered species provisions of the *Wildlife Code*. Asks Commission to oppose dam.

March 15, Acquisition of 5,147-acre Whetstone Creek Wildlife Area.

March 29, Jefferson City: Commission reaffirms Nov. 1975 policy statement on wilderness.

Plans second Governor's Fishing Seminar. Bond likes these.

Osal B. Capps registers with legislature as lobbyist.

John Lewis reports 54 turkeys killed in 1975 fall archery season.

Commission favors fall archery turkey hunting, but not gun.

Mike Crocker, president of Hillbilly Fly Rodders, Springfield, asks for catch-and-release trout fishing at Bennett Spring during the winter.

Deborah L. Claxton hired as personnel assistant, effective April 1.

Okays shipping paddlefish fry to Russia.

Okays hiking and horse trail through Sam Baker Forest.

Okays mourning dove telemetry study.

April 16, Springfield, Drury Inn: Natural areas approved: Mt. Vernon Prairie, Tzi-Sho Prairie. Brings total natural areas to 49, with 5,656 acres.

Noren reports on meeting with governor's advisory council on agriculture; they are hostile toward Department.

William Butts, president of Missouri Trout Fishermen's Assoc., asks for winter trout fishing at the parks. Commission favors.

Glen Augspurger of Springfield asks Commission to withhold sales tax from ballot as it will not pass.

Stegner says petition has necessary signatures.

May 1, 16-year-old Kelly Davis of Springfield bags 43.5-pound turkey in Stone County. Arles Runfelt, Graff, bags 34-pound 13-ounce bird in Texas County.

May 20, Kimberling City, Wilderness Point Resort: Second annual Governor's Fishing Seminar May 21-22.

Bud Eyman reports Hunter Safety program began in 1958; it is a six-hour course. Approximately 30,000 trained in 1975.

Commission approves winter trout fishing at Bennett Spring State Park on a trial basis.

Approves deer hunt on Busch Area, Nov. 13-26.

May 27, Citizens Committee turns in petitions with 200,000 signatures to secretary of state. Petitions ask vote on one-eighth of one percent sales tax for conservation.

June 6, Department receives Nature Conservancy Award for its Natural Areas program.

June 28, Jefferson City: Commission expresses "deep sense of loss" at deaths of Assistant Director Paul G. Barnickol (June 7) and Staff Specialist Harold V. Terrill (June 4).

Discussion of new "Sunshine Law" and voting by commissioners.

Sales tax signature quotas reached in districts 6, 2, 7, 10, 5. No problems in 4, 8, 9.

New budget provides for 21 new positions.

Defers replacing Barnickol until after November elections.

July 9, Secretary of state certifies petitions; issue will be on ballot Nov. 2.

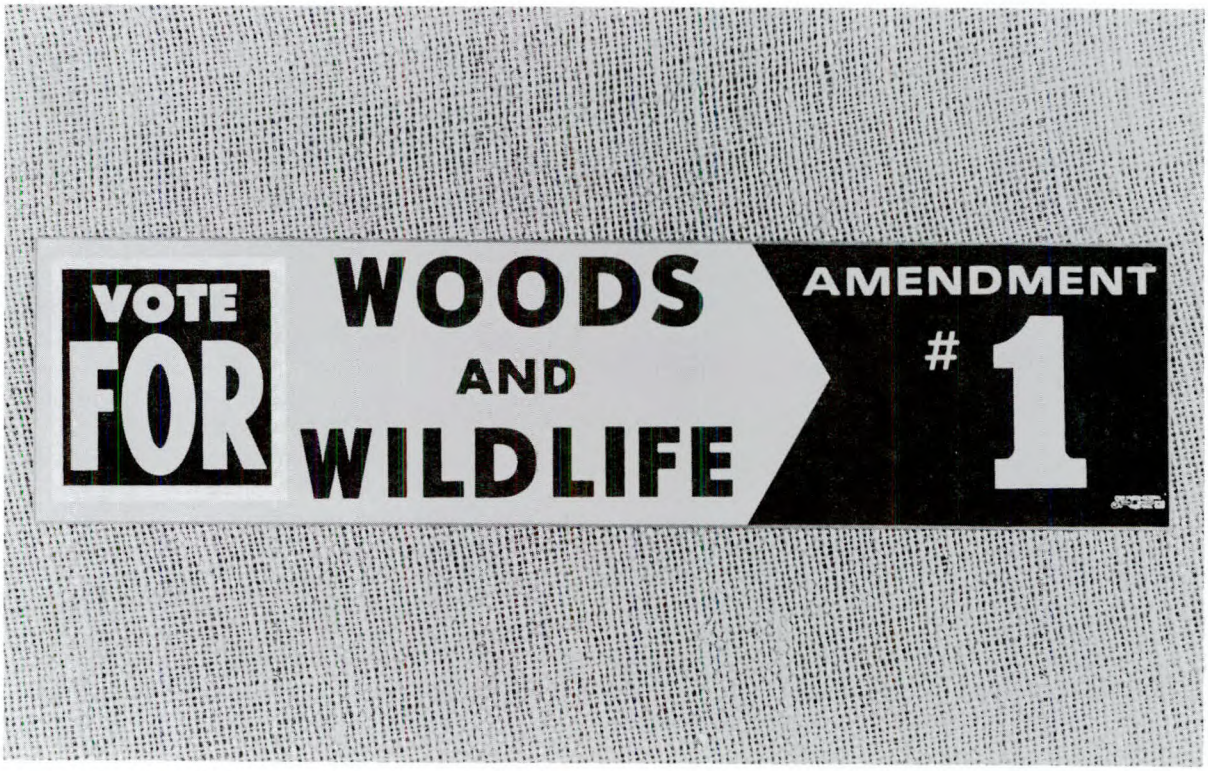
July 14, Jefferson City: New officers are Talbot chairman, Blair vice-chairman, Runge secretary and DeLaney member.



Charles Callison ponders a point during the meeting to unveil the Missouri Conservation Program Report.



Director Carl Noren prior to his retirement in January, 1979.



A popular campaign slogan, "Woods and Wildlife," helped draw voter approval for the conservation sales tax in 1976.

THE KANSAS CITY STAR

Vol. 97 Tuesday, October 19, 1976 No. 32

Voters Can Insure Future of State Conservation

In recent months the real issue behind Constitutional Amendment No. 1, which will be on Missouri ballots Nov. 2, has become abundantly clear. Either this important conservation program, along with a modest tax increase that should average less than a penny a day for most individuals, will be approved or the state will forfeit its chance for a strong outdoor program for years and maybe forever.

This is not scare talk. It is based on hard facts. Conservationists began their drive for increased funding to purchase land for the public and to expand progrms in the early 1970s. Their effort, based on a 1-cent levy on soft drinks, failed in the initiative petition stage. They came back with the current proposal, calling for a sales tax of one-eighth of 1 per cent.

Another failure would probably discourage future action. Even worse, the land that is suited for conservation programs is rapidly vanishing. Action now would spare some of that property for future generations.

In this era of increased environmental concern there is little opposition to adequate funding for "bird, fish, game, forestry and wildlife programs." It is a difficult concept to oppose and in fairness it should be quickly pointed out that the opponents to Amendment No. 1 are not attacking the principle.

They are against the method of funding. Of course, the timing is unfortunate. When the drive for signatures began many months ago, conservationists had no way of knowing that another constitutional amendment on the November ballot would call for a rollback of the sales tax on food and drugs. Had they known they might have adjusted their timetable to avoid any confusion. After No. 1 was on the ballot, however, it was too late for second thoughts.

Informed voters will want to know what they are getting and how much an expanded program will cost them. A one-eighth of 1 per cent boost is so tiny almost no one would ever notice it. It figures out to 12.5 cents on a $100 purchase and only $1.25 on a $1,000 items.

This plan offers an excellent example of how a penny here and a penny there can add up collectively to a major Missouri investment in the future. What will it buy? That question is easy to answer. A major use will be more land to support wildlife and that includes both birds and animals. The state forest system would be expanded substantially. So would other natural areas and the access to streams.

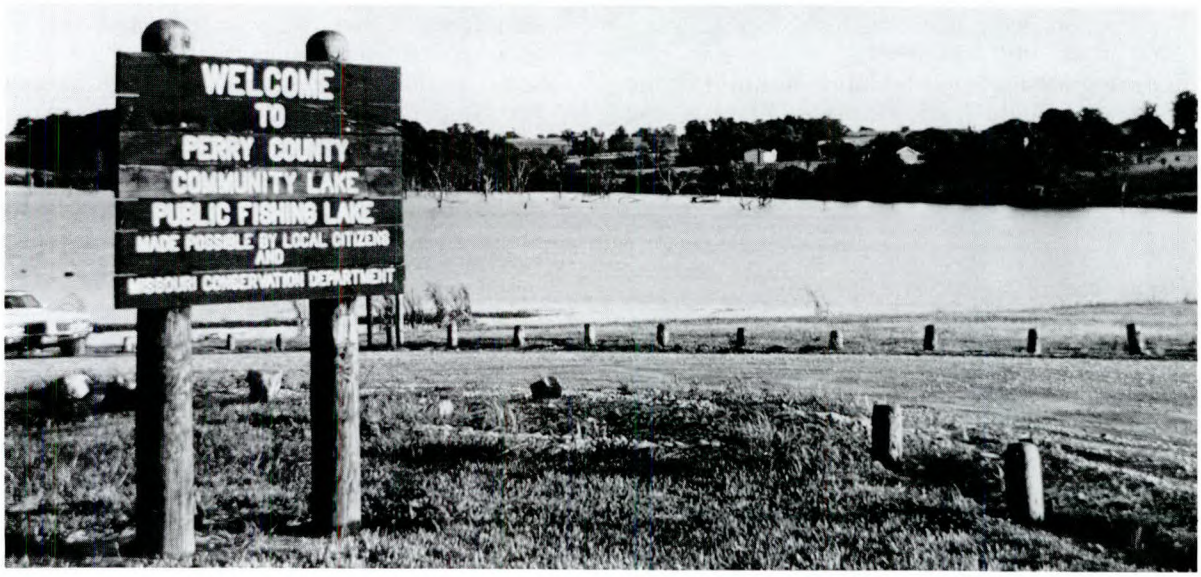
Obtaining the land is a primary requirement. Once it is acquired, expanded public-use programs come next and ample funds have been earmarked for that important purpose.

Those who support conservation but believe this program should be financed in another way are entitled to their views. But in the last decade it has become increasingly clear that no other method is available. The Legislature won't do it. The fees on hunters and fishermen cannot be boosted enough to do the job and, even if they could, it would be unfair to expect those groups to pay for programs to benefit all Missourians.

Constitutional Amendment No. 1 offers Missouri its only reasonable hope of ever having a conservation program that would meet present and future needs. Even though it would cost the average taxpayer a few pennies a week, the results would more than justify that token investment.

Paid By Citizens Committee for Conservation Ted Scott Chairman

The conservation sales tax enjoyed wide endorsement from newspapers like the Kansas City Star *and groups such as the American Association of University Women, the Audubon Society and the National Wildlife Federation.*



Nineteen lakes were constructed under the community lake program. After passage of the conservation sales tax, the Department waived the requirement that the community purchase the land for the lake.

Bill T. Crawford receives 35-year service award.
Commission asks names for areas be submitted to it for approval, using past guidelines.
Stegner reports sales tax will be on ballot in November. No organized opposition has surfaced. Needs help of Department personnel to pass. Campaign Associates not doing too well. Commission urges employees to help.
Keefe and Troughton show new film, *Deer Hunting in Missouri.*
Craig Wolf, Branson, catches 14-pound 7-ounce rainbow trout in Lake Taneycomo.

August 13, Jefferson City: Talbot absent. Stegner says Campaign Associates quit Aug. 4. Jeff Churan of Chillicothe to act as finance chairman for Citizens Committee. Director and Blair to call all supervisors in and urge they help with campaign.
Commission approves appropriation budget request of $20,305,310.
Leases two prairies from Missouri Prairie Foundation, DOC to manage them.
Five new accesses bring total to 115 in state.

September 24, Coaching great Don Faurot named honorary chairman of Citizens Committee for Conservation.

September 28, Jefferson City: Harold Terrill's widow, Mrs. Doris Terrill, accepts American Motors Conservation Award on behalf of Harold's work in conservation. Also gets retirement plaque for his 39 years of service.
Commission okays trading 50 turkeys for 1,000 pheasants with Iowa; trades 20 turkeys for 60 grouse with Wisconsin.
Representative Richard Ichord announces he opposes Union Dam. Governor Bond calling for referendum on Meramec Dam and asks if Commission concurs. It does.
Commission adopts a policy on expenses and hours involved at retirement functions after a flurry of retirements.
Okays use of billed cap by agents for pistol shooting and boat work.

October 13–14, Kansas City, Travelodge Motel: Gov. Christopher S. Bond dedicates Missouri's first metro forest—Bluffwoods, between Kansas City and St. Joseph.

October 16, Upper Big Lake near Charleston dedicated—19th community lake.

November 2, Conservation Sales Tax (Amendment 1) passes; becomes effective July 1, 1977.

November 17, El Dorado Springs, Civic Center: Commission receives award from Society of American Foresters for film *More Than Trees.*
Commission calls for study of payments to counties for tax losses; asks attorney general if Department can make payments.
Approves lowering age for free fishing from 70 to 65, effective Jan. 1, 1977, also for children under 16.
Discussion of reorganization of Department.
Master Conservationist Award voted for Ed Stegner.

December 15, Jefferson City: Mike Milonski is named assistant director. Osal B. Capps also assumes function as assistant director; though he had been designated assistant director for legislative affairs in Dec. 1975, for purposes of dealing with legislature, he actually functioned as assistant director only after this date.
Commission asks $26,000,000 additional appropriation to add anticipated sales tax funds. ($19,225,113 is for capital improvements, mainly land purchases.)
Amends community lake policy so Department may buy land instead of local sponsor.
Okays initiating study of endangered Indiana bat.
Biologist Frank Sampson will retire August, 1977.
Richard L. Clawson hired as biologist for research and survey work on rare and endangered species and non-game species.
Grace Conahan, representing Missouri League for Humane Progress, asks Commission to outlaw leghold trap.

1976 Summary: New petition drive succeeds; voters approve one-eighth cent conservation sales tax. *Design* program goes into effect.
200,000 acres are now in state forests.
Conservationist circulation at 257,000.
New or enhanced forestry programs: utilization and marketing, rural fire protection, tree improvement, vegetative management, insects and diseases, urban and community forestry.
Hunter safety trainees since 1958—220,469.
Acquisitions: Whetstone Creek, "Turkey" Kearn wildlife areas.
1976 turkey season: 14 days, Apr. 26-May 9,

two birds; add Audrain, Carroll, Johnson, Newton and Ray counties.

1976 fall archery deer: Oct. 1-Nov. 12 and Nov. 22-Dec. 31; firearms Nov. 13-21.

1977

January 1, First "slot" length-limit imposed at Watkins Mill Lake.

January 18, St. Louis, Clayton Inn: Staff now consists of Carl R. Noren, director; Larry R. Gale, associate director; Allen Brohn, assistant director; Osal B. Capps, assistant director; Mike C. Milonski, assistant director; Cyril M. Hendricks, legal counsel; Imelda Scheppers, Commission secretary.

Jerry J. Presley named state forester; Dean A. Murphy named Wildlife Division chief.

Commission authorizes an emergency wildlife feeding program because of snow and cold.

Approves reorganization of administration. Field Service to be transferred to Wildlife Division. Education Section transferred from Field Division, as a separate entity. Protection Section made a Division.

Beginning July 1, 1978, new conservation agents will be required to have a college degree in law enforcement, education, communications, biology, fisheries or wildlife management, forestry or agriculture.

Conservation Agents Association guidelines set.

U. S. Fish and Wildlife Service to impose steel shot for use in 12-gauge guns for waterfowl hunting in St. Charles County in 1977.

Statement made at Springfield hearing on Taneycomo trout fishery and oxygen problem.

February 4, Attorney general says Department cannot make payments to counties in lieu of taxes.

February 22, Jefferson City, DeLaney absent. Commission accepts one-year, no-cost lease from Nature Conservancy of Koppers Company lands.

Commission agrees to manage wildlife for public use on Union Electric Co. lands at Reform nuclear plant in Callaway County.

March 1, St. Louis: first of 13 public meetings to seek input from citizens on use of conservation sales tax funds.

March 17, Jefferson City: Blair absent. Fay M. Grogan replaces Richard Rotsch (retiring) as Kansas City metropolitan services coordinator, effective April 1.

Film *More Than Trees* won first place in OWAA competition.

Jerry Sugerman, representing Senator Danforth, presents a Meramec heritage plan for disposition of Meramec Dam lands. Commission is interested and adopts a position statement.

Establishes trophy trout fishing area on North Fork of White River, effective Jan. 1, 1978.

Kenneth M. Babcock promoted to assistant chief of the Wildlife Division effective April 1.

April 8, Ed Stegner named Master Conservationist for his work in the conservation sales tax campaign.

April 19, Joplin, Holiday Inn: Commission approves Memo of Agreement with DNR to establish a state Natural Areas System.

Approves sale of 300,000 paddlefish fry to USSR for $20,000 plus shipping costs.

Governor wants to transfer state parks administration to the Department.

Milonski reported on Town Hall meetings held throughout the state.

April 29, Dr. William Pflieger, fisheries biologist, wins American Motors Conservation Award.

May 6, Department of Conservation and Department of Natural Resources agree to form a Natural Areas Committee to administer the state's Natural Areas System.

May 26, Jefferson City: Blair absent. Corps of Engineers took over Trimble Wildlife Area to build Smithville Lake. Much concern over Trimble replacement at this time, but it was not finally replaced until 1985, with creation of Settle's Ford Wildlife Area in Cass and Bates counties.

Larry Heath of Meramec Basin Association asks Commission to support a dam on Meramec River. Commission position is unchanged.

Much concern over complaints about nonresident deer hunters in northeast Missouri.

June 20-21, Jefferson City: FY 1978 budget provides for 877 permanent positions, up 150 over FY 1977.

Vernon E. Sievert named internal auditor.

John E. Wylie transferred from assistant state forester to Natural History officer.

Natural areas to date total 51, with 5,943 acres.
First big purchases under *Design*: 8,318.5-acre Koppers Tract; 2,150-acre Buford Mountain (from The Nature Conservancy.)
Commission receives "Friends of 4-H Award" for many years of service to 4-H.
There are now five special historic weapons deer hunts on four different areas, plus two special archery deer hunts.
Conservation agent strength increased from 130 to 160 agents.
Training class of 21 new agents approved.

July 7, Department files suit in circuit court to get two percent collection fee on conservation sales tax declared unconstitutional. Legislature had put the fee in appropriation bill. It later was declared unconstitutional.

July 18, Massive fish kill below Bagnell Dam is believed to be caused by low oxygen.

July 20, Department of Revenue refuses to collect conservation sales tax on motor vehicles: ordered to do so by court until declaratory judgement is rendered.

July 21, Jefferson City: New officers are Runge chairman, Blair vice-chairman, Talbot secretary, DeLaney member.
Commission orders legal action be taken to force Department of Revenue to collect sales tax on motor vehicles and trailers.
Brackets approved by legislature for collection of conservation sales tax are source of much complaint from public. Were eventually redone.
Commission establishes rules for hunting and fishing on 3,000-acre Reform Wildlife Area (UE Tract).
Free fishing for disabled veterans and the blind is approved for 1978.

August 22, Jefferson City: W. Robert Aylward and J. Ernest Dunn, Jr., of Kansas City, replace Blair and DeLaney as commissioners. Dunn is vice-chairman, Aylward member.
William L. Pflieger receives American Motors Conservation Award for *Fishes of Missouri* and wins ACI Award. Other ACI awards: first place news program, Joel Vance; second place *Conservationist* magazine, J. F. Keefe and M. K. Johnson. Key Man Award from National Conservation Education Association to Clarence Billings.
Department has 40 men fighting fires in California.
Robert B. King is field investigations supervisor.
Ronald E. Thoma is retitled land acquisition supervisor.
Francis E. Eyman promoted to hunter education coordinator.
Aaron R. Chapman is new fiscal officer.

September 27, Jefferson City: Helene R. Miller, first female professional forester hired, assigned as farm forester to Kirksville area.

October 21, St. Charles, Busch Area: Talbot absent. Oxygen content of Lake Taneycomo still a problem. Department to do a study funded by Corps of Engineers.
Earl P. Coleman, fish and wildlife protection superintendent, promoted to Protection Division chief, effective Jan. 1, 1978, replacing Paul G. Brooks, who will retire.
Commission approves gating Mud Sink Cave and Fisher Cave in Meramec State Park, to protect Indiana and gray bat populations there.
There are now 57 natural areas designated.
Roger E. Ponder promoted to personnel officer, effective Nov. 1, replacing Gerald L. Howell, who resigned.

November 14, Brookfield, Regional Office, Div. of Parks and Recreation: Commissioner Aylward proposes a citizens advisory group, composed of six persons selected by each commissioner.

December 9, Chief Photographer Donald E. Wooldridge dies of heart attack while en route to photograph eagles.

December 16, Jefferson City: Talbot absent. Commission approves a black education program with Lincoln University.
Approves SPORT Program. (Sportsmen Policing Our Ranks Together.)
Representatives Harry Hill of Novinger and Michael Lybyer of Huggins co-sponsor a joint resolution to bring to the vote of the people in 1978 the repeal of the one-eighth of one percent sales tax, effective 1981.
Approves agent training class of 20, including three minority applicants.

1977 Summary: Saline Valley and Rebel's Cove wildlife areas, Buford Mountain State Forest acquired.

1977 turkey season: April 20–May 3; seven new counties.

1977 deer season, Nov. 19–27.

Conservationist circulation is 272,000 copies per month.

1978

January 17, Kansas City, Ramada Inn Central: James Fisher and Marvin Brown present program on land acquisition.

James E. Robertson of St. Joseph presents argument against use of steel shot in 1978.

Commission purchases land along Meramec River in St. Louis, Franklin and Jefferson counties.

Approves in principle a fall turkey season, 40 counties, Oct. 18–29; bag limit of one bird. (Adopted in February.)

Discusses problem of non-resident deer hunters in north Missouri counties. Wildlife Division asked to come up with solution.

Okays trade with Tennessee: 15 turkeys for 300 muskie fingerlings and 2,200 largemouth bass fingerlings, to be used in restocking efforts at Truman Lake.

Acquires 775-acre Burr Oak Woods at Blue Spring.

February 16, Second winter in a row of severe cold and snow cover creates hardship on wildlife.

February 17, Jefferson City: Stegner says hearings on HJR 60 to terminate sales tax June 30, 1981, introduced by Reps. Harry Hill and Michael Lybyer, will be Feb. 21. (Only six or seven people testified in favor of the bill, and they were scenic river opponents.)

Winter trout fishing at Bennett Spring continues to be popular. Number of anglers rose from 231 in 1977 to 343 this year.

Commission adopts policy statement on Department management of public lakes.

Gives formal approval to Giant Canada goose restoration program. There are flocks at Trimble, Schell-Osage, Duck Creek, Montrose, Hunnewell, August A. Busch, James A. Reed, Pony Express, Bulls Shoals, Taneycomo, Table Rock and Stockton lakes. Nesting Canada geese have been recorded from 40 counties.

Okays emergency feeding program in southeast, central and Ozark protection regions, as in 1977.

March 10, Jefferson City: Commission confirms action taken in executive session in February, appointing Larry R. Gale as director-designate, replacing Carl R. Noren when he retires in January, 1979.

Initiates a Kansas City urban fishing program similar to St. Louis'.

Okays study by Washington University to determine the status and proper management of wild ginseng.

Approves $20,000 for the state auditor to perform an audit, as requested by Commission.

John V. Frye promoted to Protection Division assistant chief.

March 17, Director Carl Noren receives "Conservationist of the Year" award from Conservation Federation of Missouri.

April 9, Gas bubble disease kills thousands of fish below Truman Dam over a period of several weeks.

April 17, Jefferson City: Noren recognized for winning American Motors Conservation Award.

James E. Robertson of St. Joseph again appeared to protest steel shot.

Charles A. Purkett promoted to assistant director in charge of Fisheries, Wildlife and Engineering, effective May 1.

Commission okays export of 2,000 silversides and 5,000 gammarus to Colorado; 5,000 freshwater shrimp to Nebraska; 5,000 freshwater shrimp to West Virginia.

Okays trade with Pennsylvania of one million white bass fry for 500,000 to one million tiger muskie eggs.

April 28, Supreme Court rules conservation sales tax applies to motor vehicles.

May 17, Salem, Tower Inn: SJR 35 goes to vote of people. Gives legislature power to fix payments by Department to counties in lieu of taxes. Department will not oppose. Aylward on record as opposing. Federation opposed and it failed at polls.

First Citizens Advisory Committee meeting set for June 3.

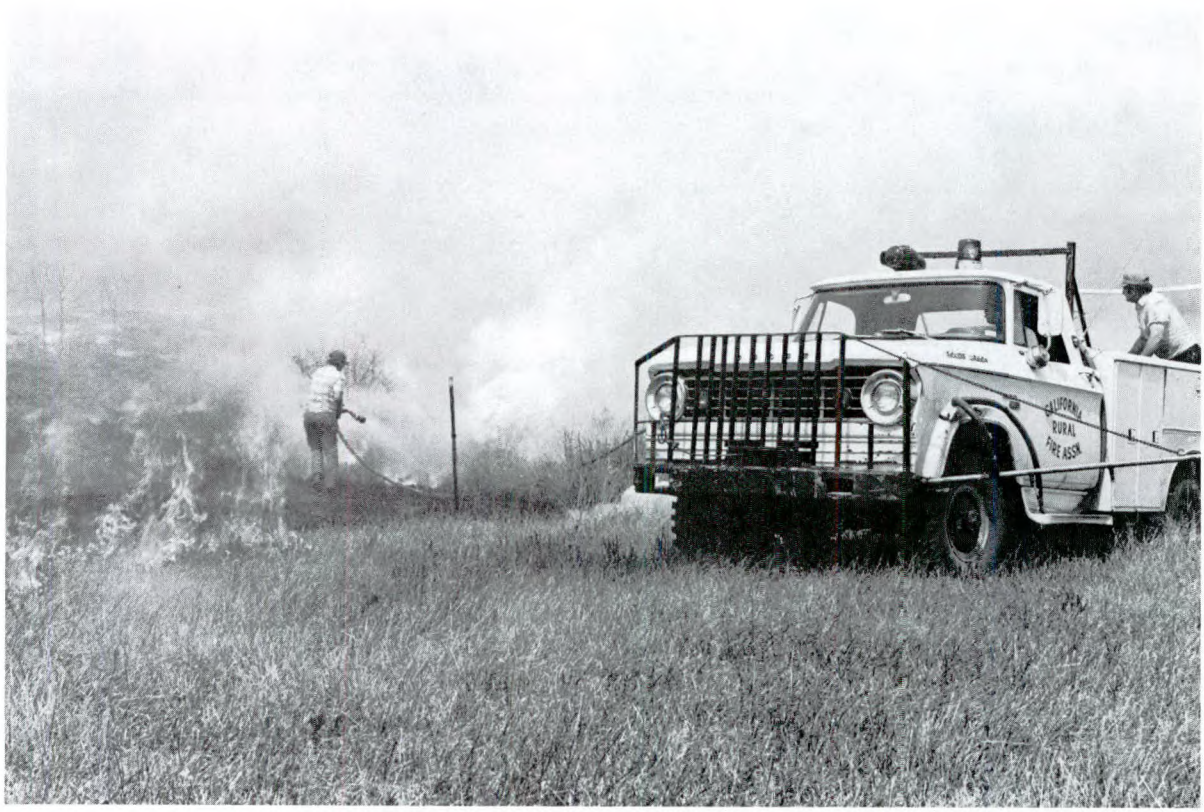
Ducks Unlimited wants Commission to establish a state duck stamp, with proceeds to go to waterfowl work here and in Canada. Attorney feels we cannot legally do this. Commission defers action.



Cameramen/biologists Charles W. Schwartz, left, and Glenn Chambers film a scene on market hunters for the 1976 film production, Return of the Wild Turkey.



Commercial fishermen in 1971 use hoop nets to harvest their day's catch.



As of 1987, the Department has distributed 1,200 grants totalling $1.6 million to rural fire protection districts in the state.



Activities that can be pursued throughout life include shooting skills, here taught by Cheryl Riley and Les Brown.

Howell Island purchased, 2,547 acres for $408/ acre.

Reorganization of Forestry Division increases forest districts to 17.

June 6, Commission asks Corps of Engineers for damages for massive fish kill at Truman Dam, and asks steps be taken to prevent further kills.

June 26, Jefferson City: Talbot absent. Mr. Dunn feels Commission should take a definite stand on Meramec Dam. Commission asks opponents and proponents to appear at July meeting.

Ducks Unlimited again asks for state waterfowl stamp.

Commission merges conservation education and hunter education into one section: Billings as conservation education superintendent; Gary D. Harvey as conservation education assistant superintendent; and Francis E. "Bud" Eyman as outdoor skills education superintendent.

June 3, Jefferson City: Special meeting with Citizens Advisory Committee.

Commission issues statement on SJR 35 (legislature fix payments in lieu of taxes) that it does not support but will not oppose the resolution.

Another big fish kill occurs on Osage River.

June 30, Commission agrees to buy Weldon Spring lands (7,230 acres) from University of Missouri for $12,400,000.

July 14, Marais Temps Clair marsh in St. Charles County is purchased.

July 24, Jefferson City: Twelve members of Citizens Advisory Committee present.

New officers are Dunn chairman, Talbot vice-chairman, Aylward secretary, Runge member.

Chester D. Barnes gets 35-year service award; Francis J. Mertens receives 40-year award.

Jerry Sugerman makes pitch against Meramec Dam. Larry Heath of Meramec Basin Association makes pro dam pitch. Runge moved Commission go on record as opposed to Meramec Dam. Seconded by Talbot. Passed unanimously.

Commission sells 8.5 acres of headquarters' land to City of Jefferson for right-of-way extension for Hwy. 179. (This was finally finished in late 1985.)

September 15, Conservation education program called "K-8" is launched in Missouri school systems.

September 26, Jefferson City: Lucian Smith appears again before Commission (first appeared in Feb. 1977) to ask Commission to pay farmers to produce wildlife.

Quail season cut back to Dec. 31 due to decline in population.

Natural Areas System now has 66 areas, 8,141 acres.

Commission approves trading 156 turkeys to Iowa for 3,000 ringneck pheasants.

Department has an education support program for minority students, whereby Department pays a scholarship, and student works part-time for Department.

October 18–19, First fall gun turkey season harvests 4,335 birds.

October 26, St. Louis, Stouffer's River Front Inn: Glaser reports on Trimble Wildlife Area replacement, which is to occupy attention until 1985. (Trimble was taken by Corps of Engineers for Smithville reservoir.)

Mr. Dunn questions propriety of "rap sessions" with agents, which the Commission has conducted in recent years, and not with other employees. Runge says it was done by another Commission to meet a specific situation. Aylward says he favors rap sessions and would add other employees. Dunn asked staff to come up with suggestions on this.

Dunn thinks Citizens Advisory Committee needs activities.

Commission okays $5,160 grant to University of Missouri School of Forestry, Fisheries and Wildlife for a bluebird study.

Okays $20,134 for a cave inventory on Department and Forest Service lands.

Okays $5,000 for raptor rehabilitation building at Springfield's Dickerson Park Zoo.

Okays 15 conservation agent trainees effective March 1, 1979, to bring agent strength to 160 men.

November 7, Legislative "in lieu of taxes" proposal beaten at polls. Stegner wants to use constitutional amendment route to provide for payment in lieu of taxes; change wording to "may" pay instead of "shall" pay.

November 15, El Dorado Springs, Civic Center: Talbot absent. Education has 4,000 teachers enrolled in new K-8 Program, expects 7,000 by end of the year.

Commission okays rural public relations program, "Partner in Conservation," suggested by Roy McGrath of Mountain View.

December 16, Squaw Creek, first Eagle Day.

For months, public has followed progress of lone moose wandering in northeast Missouri.

December 19, Jefferson City: Forty-year award for A. Reed Twichell.

Lyman Bergmanis and others of Mississippi Valley Duck Hunters Association appear to protest steel shot for waterfowl.

Commission adopts policy on opening records to public.

Combines archery fall deer and turkey hunting permits and opens archery seasons to run concurrently.

1978 Summary: Proposed FY 1978-79 internal budget of $48,031,601. Income estimated at 60 percent sales tax; 25.5 percent permits, licenses and fees; 3.2 percent from sales, rentals and leases; 2.3 percent from interest, dividends, donations; 9 percent from Federal Aid (forestry, wildlife and fisheries).

There were 130 new positions filled in FY 1977-78.

Fire control funds now make up 50 percent of forestry budget.

College degree required for conservation agents.

Acquisitions: Howell Island, Prairie Slough, Marais Temps Clair, Franklin Island, Platte Falls wildlife areas, Burr Oak Woods, Castor River, Fox Valley state forests.

1978 gun deer season: Nov. 18-26, with establishment of quotas for non-resident hunters in Units 2, 3, 4 and 5.

1978 spring turkey season: Apr. 19-May 2, in 89 counties.

1978 fall gun turkey season: Oct. 18-29 in 40 counties.

Conservationist circulation at 267,000.

1979

January 19, Jefferson City: Carl R. Noren's last meeting as director. Commission expresses its appreciation for his services and wishes him well in retirement.

Commission adopts revised land acquisition policy, authorizing purchase of land at less than appraised value. (Since July 1, 1977, there have been 107 land purchases in 55 counties, amounting to 51,724 acres at a cost of $27,039,848.)

Adopts new agreement with James Foundation on trout management at Maramec Spring.

Approves $25,000 for emergency wildlife feeding program begun Jan. 8 due to cold and heavy snows in north Missouri.

SPORT program, approved in December, 1977, has named changed from "Sportsmen Policing Our Ranks Together" to "Sportsmen Protecting Our Resources Together."

Dan F. Dickneite promoted to federal aid coordinator, effective March 1.

January 20, Vandals girdle the "Marthasville Oak," a chinquapin oak in Warren County considered largest of its kind in the state.

February 16, Jefferson City: Larry R. Gale's first meeting as director.

Mike Milonski reports Citizens Advisory Committee felt Department's performance in implementing *Design* program was good, and that Commission should take stands on controversial issues pertaining to wildlife and forestry resources.

Borchers and Heimsoth Construction Co. approved to construct new headquarters facilities.

Archer's deer hunting permit will include turkeys, rescinding archer's turkey permit.

Ducks Unlimited delegation again asks for a duck stamp. The Commission approves creating a waterfowl stamp for 1979. Proceeds of the $3 stamp to go 10 percent for administration and 45 percent each for wetland projects within and outside of Missouri.

Okays trading 15 turkeys to Illinois for 20,000 largemouth bass fingerlings.

Approves $15,000 for enhanced wildlife habitat improvement program, PAWS, (Planning Ahead for Wildlife Survival.)

Emergency feeding proves ineffective; plans adopted for intensive campaign to promote food and cover plantings this spring, following three bad winters in a row.

Stanley M. Michaelson promoted to assistant Fisheries Division chief.

March 16, Jefferson City: Trimble Wildlife Area sold to Corps of Engineers for $2,750,000 (to build Smithville Lake).

Federation opposes new duck stamp.
Steel shot for waterfowl becoming increasingly controversial.
Commission approves 14 new conservation agents training class.

April 16, Jefferson City: Gale tells Commission that because of inflation "We probably will not be able to purchase the full 300,000 acres visualized in *Design*, nor can we devote 80 percent of the budget for capital improvements."

April 18, New fish die-off from gas bubble disease at Truman Dam.

June 19, Jefferson City: Legislation passed to reduce the fee charged by Department of Revenue to collect sales tax for Department from $560,000 to $150,000.
Legislation passed to require Department to make payments in lieu of taxes on privately owned land purchased after July 1, 1977, and on forest cropland, at rates fixed by the Commission. (Must be approved by voters.)
Commission authorizes director to permit physically handicapped persons to hunt by methods not prescribed in the rules.
Okays trading 15 turkeys to Ohio for 45 ruffed grouse.
Paul D. Cook promoted to regional supervisor.
Fourteen new conservation agents assigned.
Commission approves honoring Dr. Julian Steyermark, eminent Missouri botanist, by naming a woods for him.

July 20, Jefferson City: Commissioner Robert E. Talbot died of a heart attack July 14. Commission expresses sorrow to family.
New officers are W. Robert Aylward chairman, G. Andy Runge vice-chairman, J. Ernest Dunn Jr. secretary.
Pollution problem on Big River occurs when cloudburst causes break in dam holding lead mining tailings. About 20 miles of Big River are polluted. Staff ordered to takes steps to save the stream.
Commission okays trading 100-170 turkeys to Indiana for 300-500 ruffed grouse.
Agrees to participate with U. S. Fish and Wildlife Service in a test of steel and lead shot for waterfowl hunting at Schell-Osage Wildlife Area.

August 20, Bennett Spring State Park: Commission approves federal enforcement of steel shot regulations with aye votes by Dunn and Runge, nay by Aylward.
Director Gale reports that the midwest pheasant council of the Midwest Association of Fish and Wildlife Agencies is being replaced with a farm wildlife habitat council, evidence that habitat loss for farm game is national in scope and not limited to Missouri.

September 24, Sikeston, Ramada Inn: Dunn absent. Commission approves non-resident turkey hunting for fall 1980.
Okays a farmer/landowner wildlife management survey.
Gives $500 work/scholarship to Wilbur Nesbitt, Lilburn, a student at Lincoln University.

September 29, "Steyermark Woods" near Hannibal is dedicated.

October 5, International Association of Fish and Wildlife Agencies names Missouri's Hunter Safety program the best in nation, for a second time.

October 12, Wildlife Chief Dean Murphy announces end of successful turkey restoration program in Missouri.

October 18, Kansas City, Howard Johnson Motor Court: Gordon F. "Jack" Waller of Malden replaces Talbot as commissioner; Carl DiSalvo of St. Louis replaces Runge.
DiSalvo is named vice-chairman, Waller member.
Ballistics expert Tom Roster describes experiments with steel versus lead shot; results show no significant difference in killing power or crippling incidence.

November 13, Hannibal, Holiday Inn: Resolution honoring G. Andy Runge for his services as commissioner.
Some agitation continues for repeal of the waterfowl hunting stamp. Commission orders survey to get hunter reaction.
Grass carp ban is repealed.
Fifteen thousand brown trout released in Lake Taneycomo.
Contract made with Corps of Engineers to study freshwater mussels in the Osage River basin. Corps to pay costs.

December 14, Jefferson City: National Rifle Association representative presents the International Association of Fish and Wildlife Agencies 1979 Hunter Education Award for best hunter education program in North America.

Commission waives hunting permits for those over 65, effective 1980.

Claims 18 island tracts in Missouri River. This was a project of Biologist William Dieffenbach.

Okays trading 150-200 turkeys to Kansas for 3,300-4,400 pounds of prairie forb seed.

Authorizes disposal of 8.91 acres of land in Washington County known as the Kelleter Towersite; this was the first towersite purchased by Department in 1940.

1979 Summary: Budget request of $57.2 million approved for FY 1979-80.

Acquisitions: Weldon Spring, Bushwhacker, Ben Branch Lake, Rocky Fork Lakes, Coon Island, Cooley Lake wildlife areas, Poosey and Grand Trace state forests.

1979 gun deer season: Nov. 17-Nov. 25.

1979 spring turkey season: April 23-May 6; add Grundy County, for a total of ninety counties.

1979 fall turkey season: Oct. 17-Oct. 31, in 65 counties.

Harry S Truman Lake impounded.

1980

January 11, St. Louis, Ramada Inn-Westport: Jack Waller absent. Commission reaffirms survey of waterfowl hunters, using Fleishman-Hillard Missouri Poll.

Fred Lafser and John Karel, representing DNR, present views as to ownership of Sam Baker, Indian Trail, Meramec, Deer Run, Chesapeake and Sequiota state parks. Lafser believes Meramec and Sam Baker are owned by DNR; this is disputed by Commission. Problem is finally resolved in 1981-82 by mutual agreement and legislative enactment.

Legislation (HJR 79) is proposed to divert one-half of sales tax funds to state parks. Osal Capps said he favors amendment to transfer parks administration to Department of Conservation. Commission advises Capps to "proceed in a manner which he feels is in the best interest of the Department."

Wild Edibles of Missouri by Jan Phillips is published.

February 20, Director Gale replies to complaints broadcaster Derry Brownfield made before Missouri Cattlemen's Assoc. (Also see July.)

February 21, Jefferson City: Jack Waller absent. Dean Murphy reports that of 33 states affected by steel shot program, 24 elected to stay with steel shot, six withdrew completely, and three modified their program.

PAWS program budget of $47,265 used for 125,000 pounds of seed made available to farmers.

Department plans 13-14 "Town Hall Meetings" during March and April to keep public informed of progress on *Design.*

Commissioner Aylward asks staff to continue efforts to clean up Big River mine tailings pollution.

Commission hears much concern expressed by the public over quail numbers and farm game.

Orders two appraisals on land purchases costing $1 million or more.

Makes blaze orange for deer hunters part of deer regulation.

Claims 24 islands in the Missouri River.

Okays trade with Wisconsin of 40 turkeys for 120 ruffed grouse.

Approves $100,000 for youth summer employment in conservation projects.

March 14, Jefferson City: Commissioners take short course in habitat improvement; course is given to agents for working with landowners.

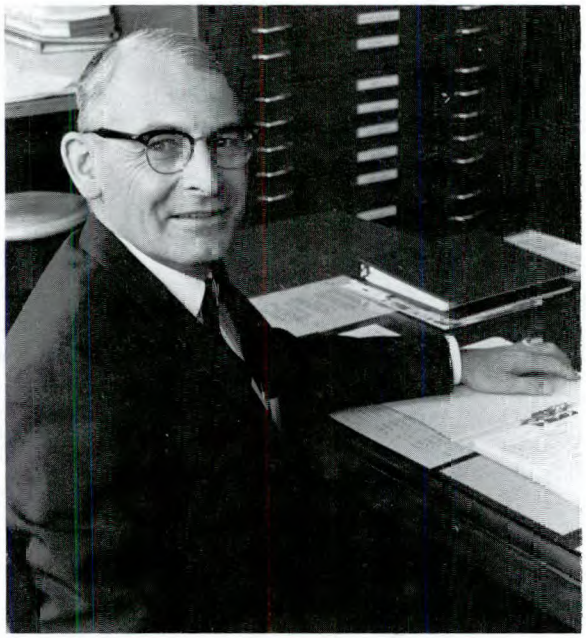
Stegner urges closer working relationship between Department and Federation.

Mo-Kan Chapter of the Waterfowl Habitat Owners Alliance brings California biologist Kenneth C. Moore to discuss lead poisoning. Moore says it exists but is not a significant factor in waterfowl deaths in California. Mo-Kan Chapter asks Commission to rescind steel shot rule.

Dale Humburg gives presentation on lead poisoning.

Commission rescinds steel shot rules three to one (Dunn opposing), saying "federal steel shot regulation placed Missouri hunters in an unfair position since hunters in some other states in the flyway were exempt from the requirement. And further, there were still some uncertainties with regard to the ballistic





The Department led the nation in establishing an urban fishing program, first in St. Louis, above left, and later in other cities. Robert F. Wells, above right, came from the CCC to head up construction and maintenance programs until his retirement in 1976. A survey crew, below, led by Bill Towell, sets up equipment at Taum Sauk in 1949.





Fisheries workers developed a trout that would spawn in the autumn instead of the spring to support a growing demand at the state's trout parks.



Jack Woodhead makes contact with a visitor to Rockwoods Reservation in 1967.



Heavy rains caused acid from a strip pit to run off into Rocky Fork Creek in Boone County in August, 1970, causing the deaths of 17,000 fish.

efficiency of steel shot and to the actual extent of lead shot poisoning in waterfowl."

Okays plans for handicapped blinds at waterfowl areas.

Waller wants crappie regulation at Wappapello repealed.

April 2, Dead and mangled paddlefish found below Truman Dam. Subsequently, 455 dead paddlefish found; deaths believed due to discharge water turbulence.

April 15, Clinton, Missouri Public Service Bldg: Commission votes to provide $2,500 to Raptor Rehabilitation and Breeding Project, Inc.

Provides $2,000 for study of rare and endangered plant species in national forests.

Okays contract with Ducks Unlimited for funding waterfowl nesting projects in southwestern Manitoba; total of $73,280 for two projects.

May 6, Columbia: Missouri Chapter of the Ruffed Grouse Society formed.

May 10, Shepherd of the Hills Visitors Center opened.

First "Prairie Day" at Niawathe Prairie.

May 16, Jefferson City: Mike Milonski retires. Commission expresses appreciation for his 22 years of service.

Sam Kirby and Stephen Clubine report on habitat, PAWS and native grass programs.

U. S. Fish and Wildlife Service representatives from Kansas City tell Commission that if steel shot rules are rescinded federal refuges will be closed to hunting this fall. Commission decides to restore steel shot requirements at Swan Lake, Upper Mississippi including Ted Shanks and Mingo.

Rescinds quotas on non-resident deer hunters in north Missouri, but requires that they take only bucks.

Orders to cease issuing pet permits for skunks because of rabies outbreaks in skunks.

Claims 19 islands in Missouri River.

June 12, Weldon Spring and Howell Island wildlife areas dedicated.

June 14, Marais Temps Clair Wildlife Area dedicated.

June 20, Jefferson City: Fleishman-Hillard Survey of waterfowl hunters shows majority surveyed favor waterfowl stamp.

Commission redefines "farmer" so person can hunt and fish on land he owns regardless of residency.

July 1, Donald K. Heard rehired by Department as assistant superintendent of Education.

July 20, Rebel's Cove Wildlife Area dedicated.

July 23, St. James, Woodson K. Woods Area: J. Ernest Dunn Jr., absent. Commission decides to postpone election of officers for at least 90 days.

Twenty people appear to protest reopening season on red foxes. Commission votes to reopen.

Commission approves class of 20 agent trainees.

Okays agreement with Wild Canid Survival Center to provide $20,000 for fencing red wolves breeding pen.

Votes to close House Springs access, Cedar Hill access and Morse Mill access on Big River in Jefferson County between the hours of 10 p.m. and 6 a.m. due to law enforcement problems. Hires private security firm to police areas July 26–September 30.

Derry Brownfield, broadcaster, appears before the Commission. He complains of trespass and brucellosis in deer. He believes the Department is weakening constitutional amendment on payments to counties in lieu of taxes, does not repair its half of common fences, and is anti-farmer in *Conservationist.* He wants a Division of Farmer Relations in the Department.

Historic weapons hunt at Knob Noster Dec. 20–22.

Extended drouth hurts nesting wildlife and causes fish kills; over 500 forest fires fought during July.

August 9, Hite Prairie near Versailles is dedicated.

August 15, Wheelchair nature trail opened at Little Dixie Lake.

August 19, Kansas City, Crown Center Hotel: Jack Waller absent. Commission reorganizes Protection Division: creates administrative assistant to the division chief to assume responsibility for training, public relations, safety, research, property and covert operations; upgrades agents from PM 2 to PM 4; creates assistant regional supervisor and regional staff specialist positions in each region; phases out district supervisor positions.

Okays trade with TVA of 50 turkeys for 85,000 channel catfish or river otters.

Adopts policy of "in lieu" tax payments.

Jack Runyan, director of state Department of Agriculture and Lowell Mohler, representing Farm Bureau, voice various complaints of agricultural interests against Department and offer suggestions.

September 12, Department issues warning not to eat Big River suckers because of high lead concentrations in the fish.

September 18, Dexter, Hickory Log Restaurant: Commission adopts policy on water pollution and toxic waste disposal.

Approves $500 scholarships and cooperative work program at Lincoln University with Angela Coates of Jefferson City and Earl Buckner of Columbia.

Wildlife Drawings by C. W. Schwartz, approved for printing.

October 14, Director Larry R. Gale elected president of the International Association of Fish and Wildlife Agencies.

October 24, Jefferson City: Commission endorses amendment to provide for payments in lieu of taxes, and orders widespread publicity.

Proposal for solving Big River mine tailings pollution is offered and accepted.

Recognition awards presented to William H. Dieffenbach for island claiming program; John A. Goddard for positive action on oil spill in Asher Creek; Gordon T. Maupin and James D. Wilson for successful Eagle Days programs; Education Section for K-8 Conservation Education Program; James F. Keefe for Jade of Chiefs Award; Joel M. Vance for Excellence in Craft Award; ACI Awards for K-8 Education program; Mike McIntosh and Cindie Brunner for book *Wild Edibles*; Joel M. Vance for news program; and Herschel P. Bledsoe for radio public service announcements.

Special Achievement Awards to Conservation Agent William H. Hitchcock, Jr. for constructing earth dams to prevent toxic chemicals from washing into Middle Fork of Salt River when a building in Paris, Mo. burned; and to Equipment Mechanic Bob Moncreif for devising a five-row seeding machine that enabled workers to accomplish in eight hours what formerly took eight employees three days to complete.

November 4, At general election voters approve constitutional amendment to allow Commission to fix payments to counties in lieu of taxes for lands purchased after July 1, 1977, and for forest cropland payments.

November 18, Jefferson City: Jack Waller absent. Commission authorizes Department to make payments to counties in lieu of taxes: $75,821.94 paid to 73 counties for lands purchased and $197,000 in forest cropland payments.

Authorizes $500 scholarship/work programs at Lincoln University for Jethro T. Clay, Columbia, Alvin A. Cooper, Hayti, Edwin A. Cooper, Hayti, Leon Surles, Saginaw, Mich. and Curtis Tipler, Bragg City.

Steve Weithman reports on 2½-year study of oxygen deficiency at Lake Taneycomo. Recommends Corps of Engineers maintain 6.6 ppm dissolved oxygen. (In 1986, following various studies by Corps, it is recommended that intake controls be established to draw water from varying levels to control oxygen content; problem stills exists as of Jan. 1986.)

December 20–22, Knob Noster State Park historic weapons deer hunt held to thin deer herd.

1980 Summary: Appropriation budget of $60,141,308 is approved for FY 1980–81.

Department now operates more than 80 fishing lakes, 150 accesses.

Kansas City urban fishing program begun.

There are now 174 uniformed men in Protection Division.

State forest acreage totals 250,000 acres.

Drought of 1980 causes worst fire year since 1950s; state is 14 inches short of average precipitation.

Long Branch Lake impounded.

Acquisitions: Grand Pass, Seat, Talbot, Crowley's Ridge wildlife areas, Wilhemina, Big Cane, Prairie Woods, Little Lost Creek, Big Creek, Fiery Forks, Canaan state forests.

Gun Deer Season: Nov. 15–23; Historic Weapons: Caney Mountain, Mincy, Peck Ranch, Ft. Wood, Swan Lake. Special archery hunt at Drury. Blaze orange to be required of gun deer hunters. Rescinds quota on north Missouri non-resident hunters.

1980 spring turkey season: April 21–May 4, add Vernon, Mercer and Lafayette counties.

Fall gun turkey season: Oct. 20–Nov. 2 in 65 counties. Archery turkey season in 95 counties.

Conservationist subscription for non-residents raised from $2 to $3/year.

Liberalizes hunting permit requirements for youths.

1981

January 21, Kansas City, Hyatt Regency Hotel: Commission passes resolution commending Larry Gale for leadership.

Biologist Mike Colvin reports on three-year crappie regulation at Wappapello. Anglers can remove all crappie from a reservoir when two to three years old, or six to ten inches long. By reducing total harvest, biologists hope to produce older, larger fish but this was not borne out at Wappapello because of mortality of older crappie, possibly due to cold temperatures in the spring of 1980. Fisheries recommended rescinding ten-crappie daily limit; limit raised to 30 crappie.

February 13, Jefferson City: Jack Waller absent. Ed Glaser reports on paddlefish. Truman Reservoir has limited natural reproduction and stocking is necessary to maintain a fishery in Lake of the Ozarks. Techniques for artificial reproduction were developed and refined and fingerlings and fry stocked in Truman Lake in 1978, 1979 and 1980. Corps of Engineers will be asked to fund the rearing facility to offset project losses.

Charles W. Schwartz receives 40-year service award.

Wildlife Division presents proposal for expanded private land wildlife habitat improvement program, based on survey of farmers and landowners and their acceptance of possible approaches.

Director Gale asks for a pilot program on multiflora rose control in selected areas with cost sharing with farmers; approved.

Commission okays trading 94 turkeys to Wisconsin for 282 ruffed grouse.

Special achievement awards to LeRoy Heman for coordinating meetings and contract negotiations in the acquisition of the Weldon Spring tract, and to Donald L. Henson for outstanding planning and design work for the reconstruction of Shepherd of the Hills Hatchery.

March 27, Jefferson City: Jack Waller absent. Commission okays trading 50,000 channel catfish to Michigan for tiger muskies received in 1975.

Okays trading 32 turkeys to Kentucky for 20 river otters.

April 15, Warsaw, Truman Dam Visitor Center: Jack Waller absent. Commission approves firearms policy statement: "The Conservation Commission of the State of Missouri, in official meeting this 15th day of April, 1981, states its continuing opposition to federal and state legislation that would put constraints on ownership and proper use of firearms and, further, expresses its support for stronger action by the courts to deal promptly and vigorously with those persons using firearms in the commission of crimes."

Recognizes Charles W. and Elizabeth R. Schwartz who will retire May 1. "No two individuals have contributed more than Charles and Libby Schwartz to the success of Missouri conservation—past, present and future."

Okays trading 50,000 hybrid striped bass x white bass to Pennsylvania for 50,000 muskellunge.

In 1981, steel shot was required at Upper Mississippi River Wildlife Area, including the Riverlands portion of the Ted Shanks Area, Swan Lake and Mingo national wildlife refuges. Mo-Kan Committee of the Waterfowl Habitat Owner's Alliance asks that requirements not be extended to other areas.

Missouri study shows lead poisoning in the 27–35 percent range, compared with the California study which showed only a four to six percent range.

May 22, Springfield, Howard Johnson Motor Lodge: Legislature passes SB 112, which gives agents authority to enforce all state laws on Department property, plus authority to enforce specific laws statewide dealing with arson, vandalism and trespass.

Also passes HB 308, which gives Commission almost complete power to determine what kind of lands will be classified as forest cropland, under what conditions, and in the future, to set the payments that will be made.

Commission adopts regulation requiring steel shot be used on Montrose, Swan Lake, Fountain Grove, Marais Temps Clair, Duck Creek (and Mingo Unit), Schell-Osage, Ted Shanks and Otter Slough wildlife areas.

Claims 20 islands in the Missouri River.

Plaque presented to Mrs. Robert A. (Patty) Talbot on behalf on her late husband's service as commissioner, 1975-1979.

June 21, "Mountain of Jade Award" from the Outdoor Writers Association of America given to Department for its *Design for Conservation* program. First time such award has ever been made to a state agency.

June 23, Jefferson City: Jack Waller absent. Larry Gale receives resolutions from House and Senate for his professional achievements and contributions in the cause of conservation.

Commission passes resolution honoring Osal B. Capps for his effective work as legislative liaison in the 81st General Assembly.

Claims 20 islands in the Missouri River.

Okays shipping 293,000 largemouth bass fry and 17,200 channel catfish fingerlings to Illinois for future trade considerations.

Extends its 12 $500 education support scholarships to Central Missouri State, Northeast Missouri State, Southeast Missouri State, Southwest Missouri State and Northwest Missouri State universities. Offers minorities $1,000 scholarships when enrolled in graduate studies in fisheries, wildlife or forestry.

Senator Clarence Heflin urges Commission to support merger of state parks system with the Department. Commission agrees such a merger would be in the best interest of citizens but funding is a problem. Commissioner Aylward thinks Department ought to give financial assistance to the Division of Parks.

Bill T. Crawford receives 40-year service award.

July 9, Construction of lake at Bushwhacker Wildlife Area begins: first major lake built since 1972.

July 24, Branson, Holiday Inn: Peter C. Myers of Matthews replaces Jack Waller as commissioner.

New officers are Carl DiSalvo chairman, Peter C. Myers vice-chairman, W. Robert Aylward secretary, J. Ernest Dunn Jr. member.

Lease agreement renewed with L-A-D Foundation to manage the following natural areas: Hickory Canyons, Ball Mill Resurgence, Clifty Creek, Piney River Narrows, Rocky Hollow, Dripping Springs, Horseshoe Bend.

Wayne Gross, representing Division of Parks, appeals for financial assistance for: certain trout park operating expenses; purchase of some park inholdings; road repairs or waste disposal. Gale pointed out the Department already spends $1 million on trout park programs, recouping less than half that amount. Commission takes Gross appeal under advisement.

Commission claims 15 islands in the Missouri River.

August 12, Lake City Training Center and Range is dedicated.

August 21, Director Gale speaks out on Missourians Against the Conservation Tax, a group launching petition drive to repeal the amendment. (Group tried unsuccessfully to get farm organizations to finance the petition drive; group finally disbands.)

August 28, Jefferson City: Gale tells Commission Clifford C. Olsen is heading a group called Missourians Against the Conservation Tax, and is trying to repeal the conservation sales tax via the initiative process.

Department to survey Citizens Advisory Committee and Federation Board regarding Department help for state parks.

September 23, Jefferson City: Proposed HJR would combine conservation and parks and change sales tax from one-eighth to two-tenths of one percent. Commission gives assent to its introduction by Senator Clarence Heflin.

Awards: hunter education program from National Rifle Association and International Association of Fish and Wildlife Agencies; Ernest Thompson Seton Award from the Woodstream Corporation for the K-8 and outdoor skills education programs.

Commission claims 20 islands in the Missouri River.

October 23, Osceola, Community Building: Commission purchases the Tiemann Tract in Madison County for $750,000; named Millstream Gardens State Forest.

Okays trading 15 turkeys to Westvaco Corp. of Kentucky for 45 ruffed grouse.

Announces otter restoration program, to begin with stocking 20 otters in Grand River area.

The survey asking about financial support for state parks reveals Citizens Advisory Commit-

tee was more favorable than the Federation Board, but there was a considerable difference of opinion in both groups.

October 30, Department acquires 1,334 acres in Taney County that includes historic Dewey Bald.

November 14, Pipeline break spills ammonium nitrate fertilizer into Dry Creek, affecting Maramec Spring and hatchery. Department collects cave fish and crayfish to save them; moves 70,000 trout.

December 3, Jefferson City: Commission adopts Saturday nearest Nov. 15 as the permanent opening date for firearms deer season.

Special Achievement Awards to: Agent Willie G. Lyles Jr. for organizing a handicapped and underprivileged children's fishing clinic; Agent Warren W. Wiedemann for organizing a successful county hunting and fishing day observance; Agent J. Michael Loe for rescuing a three-year-old boy who had fallen into a lake.

December 24, R. A. Brown Jr., former commissioner, dies.

December 31, Jack Stanford, quail biologist, retires.

1981 Summary: Acquisitions: Bob Brown, Manito Lake wildlife areas, Busiek, Riverbreaks, Painted Rock, Henning state forests.

1981 gun deer season: Nov. 14-22.

1981 spring turkey season: Apr. 20-May 3, in 99 counties.

1981 fall gun turkey season: Oct. 19-Nov. 1, in 73 counties.

1982

January 6, Special meeting. Jefferson City: Present were six from Federation, three from DNR, five others; discussion involves differences of opinion between Division of Parks and Department.

Gale reports on several legislative resolutions to transfer certain agencies to the DOC and/or divert portions of the sales tax revenue for other purposes. Representatives Jay Russell and Marvin Proffer have an amendment to transfer the Division of Parks and Historic Preservation to DOC with no additional funding. Study shows that without funding, in less than ten years Conservation Fund would be insufficient, even without land acquisition. Commission issued a statement in February presenting these facts and saying it would abide by the will of the people if it comes to a vote.

Federation opposes any change in DOC funding.

January 22, Jefferson City: Commission opposes U. S. Bureau of Land Management proposal to divert Missouri River water out of the basin.

Commission argues with Stegner about statements attributed to Federation in a Tim Renken column. Stegner feels Commission position is unclear, whether for transfer of parks or not. Commission says its position is very clear: it's up to the people.

J. R. Whitley reports on pipeline break in Nov. 1981 that contaminated Maramec Spring.

February 23, Maramec Spring restocked with blind cave fish, salamanders and crayfish rescued when Williams Pipeline break threatened the spring in 1981.

February 25, Jefferson City: Commission establishes a soil conservation reserve fund of $1 million to take care of serious erosion problems that may exist on newly acquired state lands.

Okays trade with Indiana of 333-500 turkeys for 1,000 ruffed grouse.

Designates Spring Creek Gap, Allred Lake, Bradyville, Otter Slough as natural areas.

Master Conservationist Award presented to Marlin Perkins of St. Louis who is internationally known for his work in wildlife conservation.

March 19, St. Louis, Marriott's Pavilion Hotel: Commission issues position statement vigorously opposing any constitutional changes that would curtail the conservation program approved by the people in 1976.

Approves $7,440 for construction of an endangered species propagation building for Raptor Rehabilitation and Propagation Project at Tyson Research Center in St. Louis County.

Orders staff to take any steps necessary to combat diversion of Missouri River water from the basin.

April 13, Branson, Holiday Inn: Commission passes resolution honoring nomination of

Peter C. Myers to the post of chief of the Soil Conservation Service.

Senator Edwin Dirck, Representative James "Jay" Russell and Fred Lafser, DNR, urge Commission to accept proposal from governor's office as an alternate to HJR 86. This proposed bill would divert funds from the conservation sales tax to state parks and soil conservation activities. New proposal asks trout fee increase from $1.50 to $3, with proceeds to state parks; $3 million from DOC to soil conservation work of DNR; purchase of 6,000 acres of Lake Ozarks State Park for $12 million; purchase of Columbia Bottoms from City of St. Louis. Commission opposes first two requests, but is willing to buy Lake Ozarks State Park and Columbia Bottoms at an appropriate price. Also offers to lend financial assistance to Division of Parks if legal problems can be overcome.

Approves $5,100 for an eagle breeding facility at Dickerson Park Zoo in Springfield.

Claims 16 Missouri River islands.

Corps of Engineers begins pumpback testing at Truman Dam and kills hundreds of fish.

May 21, Moberly, Ramada Inn: John B. Mahaffey of Springfield replaces Peter C. Myers as commissioner.

DOC proposals for helping fund state parks for three years rejected by governor's office; DOC has no further commitments to DNR.

Legislature appropriated $1 million from conservation fund to DNR under HB 1007, but has no authority to do so without Commission approval. DOC to negotiate specific projects where it might help DNR, up to $1 million.

Commission orders director to interview public relations firms and select one to make a study of the Department's needs in this area.

A pair of bald eagles establishes a nest on Truman Lake in Henry County (first in recent history) and a refuge is established around the nest site. Parents later abandoned the nest and one young eaglet (named Adversity) was raised at Dickerson Park Zoo and later released to the wild at Mingo National Wildlife Refuge.

Commission urges Gov. Bond to set up a Missouri water law task force to draft and follow up on legislation and policy in the water resources field.

Accepts a gift of $15,000 from an anonymous donor to pay salaries of ten minority students for summer work at Whetstone Creek Wildlife Area.

Accepts $1,995.39 from Safari Club International for a study of fawn mortality.

Claims 17 Missouri River islands.

Okays trading 35 turkeys to Arkansas for 20 river otters.

June 23, Jefferson City: New officers are W. Robert Aylward chairman, John B. Mahaffey vice-chairman, Carl DiSalvo secretary, J. Ernest Dunn Jr. member.

Herschel P. "Woody" Bledsoe receives 40-year service award.

1981 National Arbor Day Award given to DOC by National Arbor Day Foundation.

Dan Forrestal, public relations consultant, met with the Commission concerning his proposed study of the Department.

Commission claims 11 Missouri River islands.

Okays trade with Kentucky of 32 turkeys for 20 river otters.

July 19, Lake of the Ozarks, Holiday Inn: Commission hears opposition from some local residents to purchase of Lamine Wildlife Area tract. Others favor.

Authorizes program to restore trumpeter swans to Missouri.

Okays trading 75 turkeys to Michigan for 175 ruffed grouse.

Accepts $500 from Missouri Trappers Association to aid in otter restoration.

ACI awards to Department for news program, slide program, television program.

August 24, Carthage, Southwest Missouri Bank: Commission approves an experimental pheasant season Dec. 1-12 in Dunklin, New Madrid, Pemiscot and Stoddard counties.

Approves opening quail season Nov. 1, instead of Nov. 10, as it has been for many years.

Proposed Constitutional Amendment No. 2 would allow legislature to invalidate any state agency regulation. Commission opposes.

New natural areas approved: Big Buffalo Creek Marsh (addition), Diamond Grove Prairie, Mint Spring Seep, Hughes Mountain, Valley View Glades, Tupelo Gum Pond.

September 17, Jefferson City. Commission issues position statement opposing Constitutional Amendment No. 2.

Approves $25,000 payment to Ducks Unlimited for water project in Saskatchewan.



Wildlife Damage Control Specialist Kenneth Kelm, left, teaches a landowner how to trap for a damage-causing predator. Known as the "Missouri System," this method of predator control was developed by Lewis McIntosh and Robert H. Smith.



At a 1984 "Day on the River," Biologist Alan Buchanan explains the life cycle of Meramec River mussels.



The Department sponsors senior citizen fishing clinics like this one held in 1982 with Herschel Bledsoe as instructor.



Jim Duncan, center, portrays a buckskinner during "Prairie Days" in 1980.



Volunteers cross Paint Brush Prairie during a survey to determine the population of prairie mole crickets, conducted by Dennis Figg in 1987.

Approves increasing annual contribution to Fisheries and Wildlife Research Units at Missouri University from $15,000 to $18,000.

Newly-formed "Operation Game Thief" discussed.

Dan Forrestal presents his recommendations to the Commission. Urges full-time media relations managers in St. Louis and Kansas City; *Design* logo should be phased out; motion picture should be made; cable TV investigated.

October 14, Burr Oak Woods Nature Center dedicated.

October 14, Blue Springs, Burr Oak Woods Nature Center: Carl DiSalvo absent. Commission orders staff to publicize opposition to Amendment No. 2 and reasons for opposition.

Commission reaffirms its continued confidence in the ability and efficiency of Department biologists in response to disparaging remarks about biologists over steel shot issue.

October 23, Burr Oak Woods, first "Day in the Woods" program.

November 2, Constitutional Amendment No. 2 defeated at polls.

November 19, St. Joseph, Ramada Inn: Mahaffey absent. Commission reviews steel shot issue.

Establishes first ruffed grouse season in modern times: Oct. 1-Nov. 10 in parts of Boone, Montgomery and Warren counties.

Employs 22 agent trainees beginning Jan. 3.

December 10, Jefferson City: Commission expresses concern about turkey hunting accidents. DiSalvo asks about having an area where orange is required to see if it affects hunter success.

1982 Summary: DOC now has 180 accesses, 300,000 acres in state forests.

Commission adopts Operation Game Thief program of Conservation Federation.

There have been 273,734 people trained in hunter safety.

Seventeen river otters stocked at Swan Lake.

Smithville Lake impounded.

Acquisitions: Harmony Mission, Davisdale, Locust Creek, Seven Island, Ten Mile Pond, Lamine River, Four Rivers wildlife areas.

1982 spring turkey season: Apr. 19-May 2, in 100 counties.

1982 fall turkey season: Oct. 18-31, in 84 counties. Opened Howell Island to fall turkey hunting.

1982 gun deer season: Nov. 13-21.

1983

January 21, Jefferson City: DiSalvo absent. Special Achievement Awards to James M. Akery, Forestry Division, for helping control a fire in Dixon, and to Richard K. Baskett, Wildlife Division, for preventing major losses to Department property during a flood.

Shikar-Safari Club International names District Supervisor Frederick Shaw "Wildlife Officer of the Year."

Francis E. "Bud" Eyman, Education Section, receives International Association of Fish and Wildlife Agencies Award of Merit for hunter education achievement in 1982.

Commission votes to require turkey hunters at Weldon Spring and Howell Island hunts to wear blaze orange as experiment.

Purchases Rose Pond Natural History Area, 239 acres in Clark County.

Accepts $1,020 from The Nature Conservancy for the prairie management program.

DOC receives $30,000 as part of a court settlement with Dresser Industries for damage to Big River after a dam failure at a barite mill; money to be used as a research grant for aquatic damage studies by Fisheries Research Section.

Don Heard now heads Education Section.

March 24, Branson, Roark Motor Lodge: Commission okays trade with Wisconsin of ten captive-bred barn owls for four osprey chicks taken from the wild.

Issues statement opposing sale of 165,000 acres of U. S. Forest Service land in Missouri, as proposed by the Reagan administration.

April 11, Otters released in Lamine River near Otterville.

April 18, Fort Leonard Wood, Ramada Inn: Commission renames the 3,606-acre Spring River Wildlife Area the Robert E. Talbot Wildlife Area, after deceased former commissioner.

Approves administrative reorganization of the Protection Division, with assistant chief of

administration John V. Frye, and assistant chief of field, vacant. (Was later filled by Glen D. McCloud.)

April 24, Large number of paddlefish killed by water turbulence at Truman Dam; continues into May.

May 20, Warsaw, Treva and Verita's Family Restaurant: Earl Coleman, Protection Division chief, to retire May 31; resolution passed honoring his years of service.

Wildlife Division Assistant Chief Kenneth Babcock honored for his handling of the steel shot controversy.

Commission approves study with U. S. Fish and Wildlife Service of the status of the red-cockaded woodpecker in Missouri.

June 17, Kansas City, Alameda Plaza Hotel: This was last official meeting of W. Robert Aylward and J. Ernest Dunn Jr. as commissioners.

Commission salutes legislature for passage of a law that exempts landowners from certain types of liability for guests on their property, and for passage of a one-tenth of one percent sales tax earmarked for state parks and soil erosion programs.

Smoking banned during Commission meetings.

July 22, Jefferson City: Jeff Churan and Richard T. Reed new commissioners. New officers are Mahaffey chairman, Churan vice-chairman, Reed secretary, DiSalvo member.

Osal B. Capps, LeRoy D. Clark, Eugene Farrow and Earl L. Lutes receive 35-year service awards.

Department receives Flight Safety Award from Federal Aviation Administration for 35,000 accident-free hours of flight time.

Izaak Walton League and Fred Bear Sports Club Outdoor Ethics Communication Award to Education Section for SPORT graphics and SPORT Slide Show.

ACI Awards to Information Section for radio public service announcements, magazine article, news releases and multi-media presentations.

Authorizes special pheasant hunting season, Dec. 1-12 in four southeast counties: Dunklin, New Madrid, Pemiscot and Stoddard.

July 30, Boone and Crockett Club officially accepts Missouri's atypical rack deer as world record. Rack was found in St. Louis County in 1981, by Agent Mike Helland and hunter Dave Beckman.

August 9, Director Larry R. Gale elected president of the Midwest Association of Fish and Wildlife Agencies.

August 19, Jefferson City: Commission votes to retain Citizens Advisory Committee in its present form on an indefinite time basis.

Establishes three "wild trout" management areas: Blue Spring Creek (Crawford Co.), Spring and Mill creeks (Phelps Co.).

Establishes restrictions on purchase and export of ginseng, and registration of dealers.

September 16, Branson, Branson Inn Restaurant: National Park Service wants to end trapping on Ozark National Scenic Riverways. Commission orders draft opposing this.

Commission okays trade with Kentucky of 64 turkeys for 40 otters.

Special Achievement Awards to David E. Pitts, Field Service agent, and Willie R. Gray, conservation agent, for saving the life of a heart attack victim at Ozark Empire Fair.

October 1, First ruffed grouse season in modern times opens.

October 21, Jefferson City: Commission adopts resolution requesting trapping be restored to Ozark National Scenic Riverways.

Accepts 378 acres from Corps of Engineers, part of Meramec Park Lake project lands.

November 18, Hannibal, Holiday Inn: Commission decides that at this stage of the *Design* program, Department should place more emphasis on development and management of lands already acquired. Acquisition would be only moderately reduced to allow funds for development and management.

Okays trade with Wisconsin of 153 turkeys for 460 ruffed grouse.

November 29, Wilburn E. Hoskins, printing and mailing supervisor, receives Governor's Award as State Employee of the Month.

December 16, Jefferson City: Commission supports Amendment No. 2, which proposes a one-tenth of one percent sales tax for soil and water conservation and state parks, to be on the ballot in Nov. 1984.

Claims 175-acre island in Missouri River, Warren County.

1983 Summary: Acquisitions: Amarugia Highlands, Crooked River, Bunch Hollow wildlife areas, Mineral Hills, Flag Springs state forests.

Payments to counties in lieu of taxes: $189,000 to 99 counties. Forest cropland payments will boost this to $450,000.

1983 spring turkey season: Apr. 18–May 1, in 101 counties. 1983 fall gun turkey season: Oct. 17–30, in 86 counties. Firearms deer season: Nov. 12–20.

1984

January 19, St. Louis, Sheraton Plaza Hotel: Director Larry R. Gale authorized to serve on a review panel for the North American Waterfowl Management Plan as representative of state wildlife agencies, as requested by the International Association of Fish and Wildlife Agencies.

Commission removes prohibition against purchase, possession and sale of white-tailed deer by holders of a shooting area permit.

February 17, Jefferson City: Commission authorizes lead/steel shot seminars by ballistics expert Tom Roster.

Okays trading 30 turkeys to Ontario, Canada, for river otters or ruffed grouse.

Approves classification of 984,205 acres of land acquired prior to July 1, 1977, as forest cropland. Inclusion of the above acreage means that every acre of Department-owned land acquired from private owners will be returning a payment in lieu of taxes to the county.

Conservation Agent John E. Thomas receives 1983 Wildlife Officer of the Year Award from Shikar-Safari Club.

Three Farm Bureau members ask Commission to cooperate in a multiflora rose control program. Authorizes a limited program in Howell and Howard counties, staff to prepare details.

March 9, Osage Beach, Tan-Tar-A Resort: Mahaffey and Reed absent. Commission approves a limited, one-year multiflora rose control program in Howell and Howard counties.

May 10, Biologist Donald M. Christisen recipient of the Gulf Professional Conservationist of the Year Award.

May 14, Jefferson City: Winners of the First Annual Employee Communications Contest were: Don Smith, Field Service agent, for newspaper column in *West Plains Quill*; Ranney McDonough, conservation agent, for radio program; Dave Tylka, urban biologist, for television program.

Tests for radioactive materials at Busch Area and Weldon Spring indicate human health risk is negligible, except for a small stream, two springs and a slough. A hiking trail nearby has been re-routed.

Special Achievement Awards presented to hatchery employee William Patrick Davis who rescued a woman from drowning at Bennett Spring on March 22; and Hatchery Manager Gordon Proctor and Fish Pathologist Gary Camenisch who devised a procedure for improving water quality at Shepherd of the Hills Hatchery.

June 15, Boone and Crockett Club confirms atypical white-tailed deer record belongs to Missouri for deer found dead in St. Louis County in November, 1981.

June 22, Jefferson City: Commission closes groundhog hunting season Dec. 15 through the end of the spring turkey hunting season.

Adopts a position statement on the Garrison Diversion Unit-North Dakota, a project to divert Missouri River water for irrigation: " . . . based on its study and deliberations, the Commission is opposed to further construction of the project as presently designed because of the potential harm to migratory and non-migratory wildlife resources."

July 20, Gravois Mills, Millstone Lodge: New officers are Jeff Churan chairman, Richard Reed vice-chairman, Carl DiSalvo secretary, and John Mahaffey member.

August 3, Company to cease making red fence insulators that caused hummingbirds to electrocute themselves.

August 17, Jefferson City: Col. Robert M. Amrine, Corps of Engineers, reports on pumpback studies at Truman Dam, and studies conducted as a result of fish kill, March, 1982.

Commission okays trading 500 turkeys to Indiana for 1,500 ruffed grouse.

September 14, Jefferson City: Commission okays trading 324 turkey to Kentucky for 180 river otters.

Special Achievement Award to Conservation Agent Mikel A. Damico for rescuing residents, tourists and property during June flooding at Big Lake State Park.

Edwin H. Glaser promoted from environmental services officer to assistant director, and named legislative assistant, replacing Osal B. Capps, effective October 1, 1984.

September 21, Director Larry R. Gale receives "Seth Gordon Award" for distinguished service to conservation from International Association of Fish and Wildlife Agencies.

September 28, "K-8" education program replaced by more up-to-date programs: "Conservation Seeds" (early childhood), "Learning With Otis" (grades 1-6), "The Conservation Education Series" (grades 7-12) and "Conservation Frontiers" (for citizens aged 8 to 80).

September 29, Woodson K. Woods Wildlife Area scene of first "Day on the River" program.

October 3, Russ Reagan, longtime Department photographer, succumbs to cancer.

October 12, Jefferson City: Richard T. Reed absent. Commission authorizes staff to seek an appropriation budget of $69,080,411 for fiscal year 1986, including an operating budget of $44,080,411 and a capital improvements budget of $25,000,000.

Senator Danny Staples has introduced a Senate Joint Resolution to divert part of the conservation sales tax funds to Division of Tourism. Staff ordered to oppose this.

Mark Twain Lake is stocked with 6,732 lake sturgeon.

Kenneth Babcock named to succeed retiring Dean Murphy as Wildlife Division chief.

October 31, Branson area residents object to opening Canada goose season on Lake Taneycomo. They ask court for restraining order.

November 16, Chillicothe, Community Bank: Col. Robert M. Amrine, Corps of Engineers, sent letter saying no further pumpback testing at Truman Dam is necessary, that future operations will not include pumpback.

Commission decides to emphasize public relations in St. Louis and Kansas City metro offices.

Authorizes a conservation agents training class of 15 to begin Jan. 3, 1985.

December 14, Jefferson City: Richard Reed absent. Biologist Donald L. Christisen receives 40-year service award.

Department receives Outdoor Ethics Communication Award from the Izaak Walton League and Fred Bear Sports Club for multi-media show prepared by Cheryl Riley, Tom Troughton and Herschel P. Bledsoe.

ACI awards: first place for motion picture *Guarding Our Living Environment*, produced by Gary Griffen, Dale DeToni and Tom Troughton; second place for multi-media show "Show-me Conservation" produced by Barbara Bassett, Dale DeToni; first place for news program by Joel M. Vance; first place for radio program by Herschel P. Bledsoe.

Nature Conservancy Stewardship Award is presented to Biologist Thomas E. Toney for prairie management.

Society of Range Management, Southern Section, Distinguished Service Award presented to Stephen E. Clubine for promotion of warm season grasses and prairie management.

Commission okays trading 36 turkeys to Illinois for 20 river otters.

Issues statement opposing Senator Danny Staples' bill to divert conservation sales tax funds to Tourism.

December 27, Bill Hecker of Rogersville catches record rainbow trout at Lake Taneycomo: 16 pounds, 12 ounces.

1984 Summary: DOC now has 200 accesses, 180 uniformed personnel in Protection.

There are 310,215 people trained in hunter safety.

Mark Twain Lake impounded 1984.

Acquisitions: Indian Creek, Hazel Hill community lakes, Mussel Fork Wildlife Area, White Ranch, Donaldson Point, Hidden Hollow state forests.

1984 ruffed grouse season: Oct. 1-Nov. 30, two birds daily, four in possession.

1984 firearms deer season: Nov. 10-18.

1984 spring turkey season: Apr. 23-May 6, in 104 counties.

1984 fall gun turkey season: Oct. 15-28 in 86 counties.

1985

January 18, Jefferson City: Two Texas County farmers complain of deer depredations, and deer hunting regulations for landowners.

Commission orders staff to remain neutral on

legislation requiring firearms be cased in cars.
Proposed bill to divert 25 percent of the conservation sales tax to Tourism Commission fails.

February 15, Kansas City, Westin Crown Center: Staff proposes a three-year program to phase in use of steel shot for waterfowl hunting to minimize risks of lead poisoning to waterfowl, eagles and other wildlife. Provisions include: steel shot requirements extended to nine additional Department areas in 1985; steel shot for all waterfowl hunting in five major zones in 1986; steel shot for all waterfowl hunting in Missouri in 1987. Commission orders plan be publicized to determine public opinion.
Okays agreement with City of Kirksville to manage Hazel Creek Lake.
Continues multiflora rose control program in Adair, Howard and Crawford counties for another year.

March 8, Osage Beach, Tan-Tar-A Resort: Mahaffey absent: Commission hears opponents and proponents of the steel shot phase-in program proposed in February. Commission defers action.

March 29, Department warns against eating fish from lower Meramec River because of chlordane contamination.

April 16, Jefferson City: Presentation of Master Conservationist Award to Dr. Thomas Baskett, long-time leader of Cooperative Research Unit.
Vern A. Mensie of Waterfowl Habitat Owners Alliance asks Department to begin a mallard hatchery program.
Commission hears requests to stop further action on steel shot use in waterfowl hunting. Commissioner Mahaffey moves to implement only Step 1 of the steel shot proposal. Commission concurs, with Churan abstaining.
Regulations Committee proposes larger any-deer quotas to alleviate deer depredation problems.
Proposed bill, HJR 36, would give legislature power to invalidate rules of state agencies, but Department is exempted. (Exemption was later dropped.)

April 22–May 5, Spring turkey hunt sets new record; 24,772 birds taken.

May 23, Springfield, University Plaza Hotel: Commission passes resolution honoring broadcaster Bill Ring of Springfield for his contributions to conservation.
Okays trading 32 turkeys to Louisiana for 20 river otters.
Decides not to undertake a mallard propagation program.
Group appears complaining of decline of quail in southwest Missouri; requests a quail stocking program, using wild-trapped birds.

June 21, New film *The Living Landscape* is released. First time film is released also as video cassette.

June 28, Lake Ozark, Lodge of the Four Seasons: Commission passes resolution honoring Carl DiSalvo, retiring commissioner, and General Counsel Cyril M. Hendricks, entering private practice after ten years of service.
Approves agreement with St. Louis County Parks Department to manage three lakes for fishing: Bee Tree Lake, Sunfish Lake and Creve Coeur Lake. Approves payment to Ducks Unlimited of $44,500 as final payment on Tatagawa Lake Project and $18,300 as first installment on Upper Buffalo Pound Project in southeastern Saskatchewan.
Approves agreement with Corps of Engineers for Department to produce 30,000 paddlefish annually for stocking in Truman Dam area, with one-time payment to Department of $1,854,519 to offset costs of hatchery facilities.

July 18, Jefferson City: New officers are Richard T. Reed chairman, John B. Mahaffey vice-chairman, Jeff Churan secretary, Carl DiSalvo member.
Commission passes resolution honoring the Conservation Federation of Missouri on its 50th anniversary.
Claims 15 island tracts in the Mississippi River totaling 1,769 acres.
Information Officer James F. Keefe reassigned as staff specialist, M. K. Johnson named acting Information officer.
Communications Contest winners are Agent Charles Maupin for radio program, Agent Gordon L. Jarvis for television program and Field Service Agent Don Smith for newspaper column.

August 15, Chesterfield, Doubletree Hotel: John Powell of Rolla replaces Carl DiSalvo as commissioner for a term ending July 1, 1991.

Commission establishes two zones for quail: north zone Nov. 1-Jan. 1, and south zone Nov. 10-Jan. 10, with 6 and 12 limits. Churan casts "no" vote.

Approves one-year leases for three accesses on Big River.

Special Achievement Award to Biologist Spencer Turner for saving a man's life using Heimlich maneuver learned at DOC course.

August 30, Special meeting, Jefferson City: Commission passes a regulation to comply with a federal court ruling resulting from a suit brought by National Wildlife Federation. The ruling requires steel shot for waterfowl hunting in Holt, St. Charles, Lincoln, Pike counties and the Swan Lake Zone.

Increases quail bag limits to 8 and 16 in the north zone.

September 19, Cape Girardeau, Holiday Inn: Commissioner Powell expresses concern about quail decline in Ozarks; asks for crash program to restore them to good population levels. Commission orders staff to develop quail restoration program.

September 23, Dan Saults, former assistant director, dies.

October 22, Jefferson City: Mahaffey absent. Commission approves an expansion of Fisheries programs in anticipation of new Wallop-Breaux funds from federal excise taxes: $1,745,000 in funds, 28 new positions.

Approves Settle's Ford Wildlife Area in Cass and Bates counties for the Trimble Area replacement.

St. Louis Regional Commerce and Growth Association (RCGA) proposes a one-fourth cent sales tax, combining the conservation sales tax (one-eighth) with a permanent state parks and soil erosion tax (one-tenth), and adding a tax for local parks and cultural institutions. Commission instructs director to notify the Association that it will oppose any effort to combine the conservation sales tax funds with funds for programs administered by other agencies.

Commission abolishes federal aid coordinator post; will be performed by environmental services officer.

November 16-24, Deer hunters set new record with 80,770 deer taken despite bad weather.

November 26, Jefferson City: Commission okays trading 36 wild turkeys to Arkansas for 20 river otters.

Accepts $8,000 from National Wild Turkey Federation for research.

Accepts $160,000 from Maurine Raidler Trust to buy land in memory of Dr. John A. Fuson.

December 20, Jefferson City: Wildlife Chief Babcock outlines proposed quail restoration program. Directed to resubmit the proposal in January based on suggestions made by Commission.

Commission encounters problems getting development jobs bid because of requirement that prevailing local wage be a part of the bids; difficult to get agreement as to prevailing local wage.

Bid let to Lehr Picture Production Co. for 28-minute white-tailed deer movie.

1985 Summary: Commission approves an appropriation budget of $71,953,053: $46,953,053 operating budget and $25 million for capital improvements.

Longview Lake impounded.

Acquisitions: Settle's Ford, Bois D'Arc wildlife areas.

Payment of $563,739.41 made to counties in lieu of taxes.

1985 firearms deer season: Nov. 16-Nov. 24, with large increase in any-deer permits.

1985 fall firearms turkey season: Oct. 14-Oct. 27.

Ruffed grouse season: Oct. 15-Dec. 18.

1985 spring turkey season: Apr. 22-May 5, statewide for the first time.

1985 fall gun turkey season: Oct. 14-27 in 86 counties.

1986

January 24, Jefferson City: Commission passes resolution honoring Leon A. Cambre, retired U. S. Forest Service supervisor, for his performance in dealing with natural resource and environmental matters.

Continues multiflora rose control program for two more years.

Approves strategy for enhancing quail population program submitted by Wildlife last month.

Information Section re-named "Public Affairs."



Nothing holds the attention of youngsters more than wildlife—and the Department's Conservation Education programs developed since 1941 have capitalized on that interest.



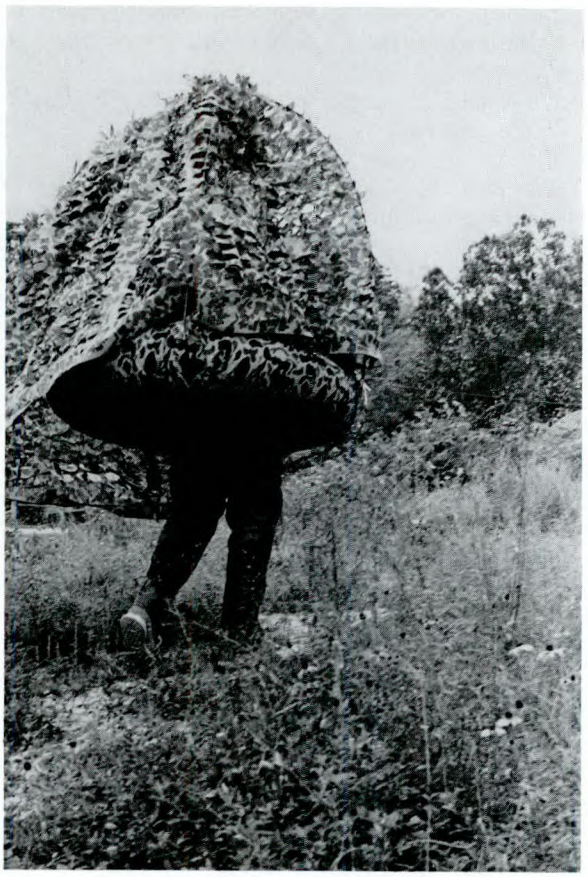
Permit sales, conducted here by Shirley Bussel, remain an important source of conservation funding.



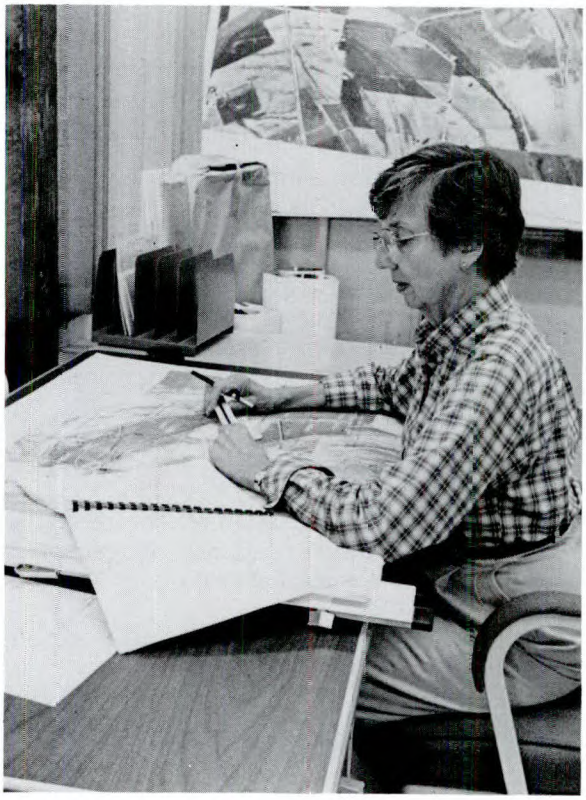
Agent Steve White models the conservation agent uniform used from 1970 to 1985.



Governor John Ashcroft greeted Otis the Conservation Mouse on his tour of the Department in the fall of 1986.



Mobility is one of the features of this floating photography blind, modeled by Photographer Jim Rathert.



New fishing lakes start on the drawing board—here in the office of Dorothy Schoech, Engineering.

MISSOURI CONSERVATION COMMISSION

CONSERVATION DEPARTMENT MISSOURI

50 YEARS of CONSERVATION

1937 • 1987

Presents 35-year service awards to Kerwin F. Hafner, James N. Harlan and Robert B. Lipscomb.

ACI award for multi-media show to Thomas J. Troughton.

March 3, J. Vernon Bennett, former chief of Protection, dies.

March 7, Osage Beach, Marriott's Tan-Tar-A Resort: Commission approves return to mandatory checking of archery deer and turkey kills.

Purchases 1,956-acre Apple Creek State Forest in Cape Girardeau County.

Purchases 968 acres and receives a gift of 747 acres in Pemiscot County to become Boat Club Chute Wildlife Area.

March 28, Ted Scott, chairman of the Citizens Committee for Conservation that put on the 1976 campaign, dies.

April 11, St. Louis: Mahaffey absent. Commission authorizes increasing Outdoor Skills staff by four; increases fisheries management biologists by 17.

May 14, Jefferson City: Presented Special Achievement awards to conservation agents Jimmy Tennyson and George Manville for saving property at a burning home in risk of their lives.

June 13 Branson: Commission hires Jonathan D. Powers as Public Affairs officer.

Gives Special Achievement Award to Agent Roger Peecher for saving the life of a choking man.

July 18, Jefferson City: New officers are John Mahaffey chairman, Jeff Churan vice-chairman, John Powell secretary, Robert Reed member.

Commission passes resolution honoring Ted Scott for his long years of service to conservation.

Accepts $3,000 contribution from Bootheel Boss Gobblers Chapter of National Wild Turkey Federation for turkey management and research.

Accepts OWAA award for motion picture, *The Living Landscape.*

Makes Special Achievement Award to Forestry Aid Lloyd Johnston for saving an accident victim's life.

August 15, Sedalia: Best Western Motor Inn: Mahaffey absent. Commission approves purchase of 3,304 acres in Scotland County to become Indian Hills Wildlife Area.

September 9, Safety Officer James R. Watson killed while inspecting Department shooting range.

September 19, Jefferson City: Commission approves purchase of 1,038 acres in Audrain and Monroe counties to become Robert M. White II Wildlife Area.

Establishes closed hours from 10 p.m. to 4 a.m. on a number of accesses and other areas where unauthorized uses are a problem.

Accepts a cash gift of $72,000 and 200 acres in Crawford County from the estate of Herbert W. Mais.

Authorizes a payment of $57,900 to Ducks Unlimited for development of the Upper Buffalo Pound Project in southeastern Saskatchewan.

Authorizes expenditure of $783,000 over three years through the North Central Forest Experiment Station to expand and intensify the forestry inventory and analysis of Missouri.

October 17, Sikeston: Mahaffey absent. Commission votes to lower veterans' disability license exemption from 70 percent disabled to 60 percent.

Approves new letterhead and 1987 permit design observing Department's 50th anniversary.

Authorizes construction of a 55-acre lake on Amarugia Highlands State Forest.

November 14, St. Louis: Approves purchase of 112-acre site in St. Louis County for a new nature center.

Accepts gift of 177 acres fronting on Lake Taneycomo in Taney County from Ralph and Virginia Lucas.

Votes to require bright yellow sticker be placed on receiver of turkey hunters' shotguns as a reminder to be certain of targets.

November 15–23, Gun deer season harvest all-time high of 102,845 deer.

December 19, Jefferson City: Commission votes to require any person born after January 1, 1967, to complete a hunter safety training course in order to purchase any firearms hunting permit, to become effective January 1, 1988.

Okays trading 619 turkeys to Kentucky for 344 river otters.

Authorizes a class of 18 conservation agent trainees to begin Jan. 5, 1987.

Authorizes a pilot anti-littering campaign on four Ozark streams as a 50th anniversary project.

1986 Summary: Commission approves an appropriation budget for FY 1987-88 of $76,614,326; includes $51,614,326 for operations and $25 million for capital improvements.

Acquisitions: Apple Creek State Forest, Boat Club Chute, Indian Hills and Robert M. White II wildlife areas.

1986 spring turkey season: Apr. 21-May 4, statewide.

1986 fall gun turkey season: Oct. 13-26 in 89 counties, two-turkey limit for first time.

There are now 57 counties with direct permit distribution.

Office of the Governor
State of Missouri

Proclamation

WHEREAS, on November 3, 1936, a cold and fair day, Missourians went to the polls and created a new and nationally unique conservation system, bipartisan and constitutionally authorized; and

WHEREAS, a half century later, that system has grown to national stature and has brought credit to the State of Missouri by its professionalism and leadership; and

WHEREAS, Missourians deserve a superior conservation program for this is an outdoor state as proved by the fact that a fifth of the population actively hunts or fishes and many more engage in other outdoor activities; and

WHEREAS, Missourians have benefitted directly from the system they created and have supported by a restoration of the wildlife once plentiful in our lovely state, by the creation of rewarding places to go, and by many programs such as conservation education, work with endangered and rare species, outdoor ethics and safety training, access to fishing waters and nature interpretive centers; and

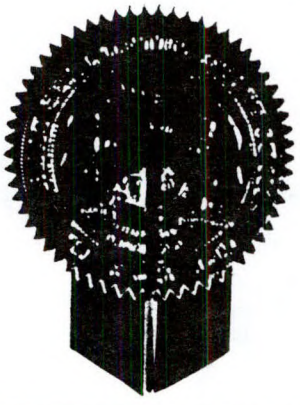
WHEREAS, a half century of conservation progress and achievement is unparalleled in the country:

NOW, THEREFORE, I, JOHN ASHCROFT, GOVERNOR OF THE STATE OF MISSOURI, in recognition of fifty years of conservation achievement, do hereby proclaim November 3, 1986, as

FIFTY YEARS OF CONSERVATION DAY

and urge my fellow Missourians to continue their support of our fine conservation program and to enjoy the programs and facilities they created and have supported so loyally for so long.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri, in the City of Jefferson, this 12th day of September, 1986.



John Ashcroft
Governor

Attest: Roy D. Blunt
Secretary of State

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We apologize for any omissions or errors in photo credits, they were not intentional.

*(**T**)=Top photo; (**M**)=Middle photo; (**B**)=Bottom photo; (**L**)=Left photo; (**R**)=Right photo*

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BRING 'EM BACK TO MISSOURI





NO TAXES

VOTE YES SCRATCH NO

PROPOSITION NO. 4


MISSOURI
CONSERVATION
COMMISSION
CONSERVATION
DEPARTMENT
MISSOURI